BOROUGH OF PRESTON.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

URBAN AND PORT SANITARY AUTHORITIES,

FOR THE

Year ending December 31st, 1904.

H. O. PILKINGTON,
Medical Officer of Health,
Medical Officer to the Port Sanitary Authority.

1905

ROYAL STATISTICAL SOCIETY
6 JUN 1905

P P

BOROUGH OF PRESTON.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

URBAN AND PORT SANITARY AUTHORITIES,

FOR THE

Year ending December 31st, 1904.

H. O. PILKINGTON,
Medical Officer of Health,
Medical Officer to the Port Sanitary Authority.

Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

https://archive.org/details/b29998050

Report of the Medical Officer of Health.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

Gentlemen,

Although the recorded death rate for the past year of 1904 is slightly higher than that for either of the two years immediately preceding, the difference is but a small one, and the three years in question, 1902-3 and 4, may be grouped together as showing the lowest rates observable in the recorded annals of the Borough.

This applies to the rates alone, since the past year includes 53 weeks, and the actual number of deaths from any given disease, as well as the total number from all causes, is necessarily higher than would have been the case had the year been of the usual length, and had it not contained a number of days left over from the previous year, and not dealt with in the statistics for that period.

I propose to follow the course adopted in former Reports, and to consider each of the various causes of death set forth in the mortality returns, noting any peculiarities connected with them, and the position which they severally occupy as compared with deaths registered under the same headings in past years, and in certain other of the large towns.

From the end of October, 1903, until April of last year, the town remained free from Small Pox. But the disease was present in several of the neighbouring towns, and the possibility of its sudden importation, especially by members of the tramp class, was never lost sight of during the whole of this time.

In the middle of April the disease was so imported by means of an unvaccinated tramp, who had walked from Manchester, through Bolton, and had passed the night, previous to notification of the disease, in one of the Common Lodging Houses in this town. He was immediately removed to hospital, the Lodging House was thoroughly disinfected, and the other inmates were kept in quarantine, whilst every effort—including payment of 1/- per head—was made to induce them to take advantage of the protection afforded by re-vaccination.

In spite of the many unfavourable circumstances attendant upon the case, no extension of infection took place; and the patient, having recovered from a fairly severe attack, left the hospital towards the end of May. Nothing further occurred until June 27th, when a boiler maker, who had been travelling the country in search of work, arrived at the residence of a relative—a Public House—complaining of illness. This proved to be Small Pox of a confluent type, and after the removal of the patient, the usual steps were taken, by disinfection and revaccination, to protect the other inmates of the house, those frequenting it, and residents in the neighbourhood. In this, as in all similar cases, information was sent to the Medical Officers of those towns or districts through which the patient had recently travelled, and where possibly the germs of infection might have been left. The next case following upon this, but in no way connected with it, came under notice on July 12th, and here again the surrounding conditions were such as to cause grave anxiety as to future results. The patient—a male adult—was resident in a small, ill-ventilated, and dirty house, occupied by a large family, and used for the purpose of an old clothes shop. Failing any definite history of the source of infection, it would seem not improbable that the disease had been conveyed in some cast off clothes which had been used by, or had been in contact with, a case of Small Pox, either in this or some other town. The defensive measures adopted, upon the removal of the patient, again proved satisfactory, and in spite of the unpromising conditions no subsequent case could be associated with this outbreak.

After this there followed a short intermission until August 2nd, when a male inmate of a Common Lodging House—not the one associated with the first case discovered in April—was found to be suffering from a fairly well marked attack. On the same day another—but much milder case—was removed to hospital in company with this patient. A connection could be found between the two cases, in as much as the second one was employed at a Public House which had been visited by the first-named patient. Two days afterwards the landlady of another Public House, immediately opposite the Lodging House, developed the disease, and here again there could be little doubt as to the source of infection. From this date, up to the end of the year, there was a constant succession of fresh cases, the greatest number admitted to hospital on any one day being 7 on December 5th, though there were several other days when 3, or even 4, fresh patients were so dealt with. At the close of the year the epidemic was in full force, but in the present Report, I deal only with those cases, shown on the accompanying Table, which actually occurred during the year 1904 :—

Consecutive Number in Register.	Sex.	Age.	Vaccination.		Unvaccinated	Nature of Disease.	Result.	Remarks.
			When done.	Marks.				
47	M	31			Yes	Variola Semi-confluent	Recovery	
48	M	33	Infancy	3		Variola Confluent	,,	
49	M	25	,,	1		,, ,,	,,	
50	M	48	,,	2		Variola	,,	
51	F	28	,,	4		Variola Modified	,,	
52	F	34	,,	1		Variola	,,	
53	M	34	,,	3		Variola Confluent	,,	
54	F	50	,,	2		Variola Modified	,,	
55	M	41	,,	none		Variola Confluent	Death	Alcoholic Subject. Septic Pneumonia.
56	M	41	,,	2		Variola Modified	Recovery	
57	M	37	,,	none		Variola Confluent	Death	Alcoholic Subject.
58	F	29	,,	3		Variola Modified	Recovery	
59	F	25			Yes	Variola Semi-confluent	,,	
60	M	16	,,	2		Variola	,,	Brother to 61
61	F	7			Yes	,,	,,	Sister to 60.
62	M	42	,,	2		,,	,,	Father to 60 and 61.
63	F	49	,,	2		,,	,,	
64	M	29	,,	3		Variola Modified	,,	
65	M	35	,,	3		Variola	,,	Husband to 70, Father to 69
66	M	42	,,	2 slight		Variola Confluent	Death	Alcoholic Subject
67	M	52	,,	2		,, ,,	,,	Alcoholic Subject. Chronic Bronchitis, Ulcer of leg.
68	F	14			Yes	Variola	Recovery	
69	M	5			Yes	,,	,,	Daughter of 65 and 70.
70	F	30	,,		Yes	,,	,,	Wife of 65
71	F	47	,,	3		,,	,,	Acute Mania.
72	F	47	,,	2		Variola Confluent	,,	
73	M	18	,,			Variola	,,	
74	F	35	,,			,,	,,	
75	M	19	,,	none		Variola Confluent	,,	
76	M	18	,,	none		,, ,,	,,	Brother to 78 and 83.
77	M	52	,,	2		Variola	,,	Secondary abscesses.
78	M	15			Yes	,,	,,	Brother to 76, 83, and 88.
79	F	10			Yes	,,	,,	
80	M	48	,,			Variola Modified	,,	Successfully revaccinated a week before admission
81	M	18	,,			,, ,,	,,	
82	M	20	,,	4		,, ,,	,,	
83	M	20			Yes	Variola Confluent	,,	Brother to 76 and 78. Secondary abscesses
84	M	15	,,	2		Variola Modified	,,	
85	F	40	,,			,, ,,	,,	Successfully revaccinated a week before admission.
86	M	39	,,			Variola	,,	
87	F	19			Yes	,,	,,	
88	F	30	,,	3		Variola Modified	,,	Sister to 76, 78, and 83.
89	F	16	,,	3		,, ,,	,,	Sister to 90.
90	F	21	,,	3		Variola Confluent	,,	Sister to 89.
91	M	6			Yes	,, ,,	,,	
92	M	30	,,	2		Variola	,,	
93	F	26	,,	2		,,	,,	Daughter to 109.

Consecutive Number in Register.	Sex.	Age.	Vaccination.		Unvaccinated	Nature of Disease.	Result.	Remarks.
			When done.	Marks.				
94	M	30	Infancy	2		Variola Confluent	Recovery	Secondary abscesses.
95	M	30	,,	3		Variola	,,	
96	M	32	,,	2		,,	,,	
97	F	25	,,			,,	,,	
98	M	31	,,	2		,,	,,	Brother to 99 and 115.
99	F	28	,,	2		,,	,,	Sister to 98 and 115.
100	M	18	,,	4		,,	,,	
101	F	36	,,			,,	,,	
102	F	34	,,	1		,,	,,	
103	F	26	,,	3		,,	,,	
104	F	17	,,	4		,,	,,	
105	M	37				,,	,,	
106	F	45	,,	2		,,	,,	
107	M	20	,,	4		,,	,,	
108	F	Infant	,,			,,	,,	
109	M	55	,,			,,	,,	Father to 93.
110	F	17	,,			,,	,,	
111	M	35	,,	slight		,,	,,	Re-vaccinated 5 days before admission
112	M	35	,,	3		Variola Modified	,,	
113	M	35	,,	slight		Variola Confluent	Death	Alcoholic Subject.
114	F	30	,,	2		Variola	Recovery	Sister to 116.
115	F	43	,,	2		Variola Confluent	,,	Re-vaccinated 6 days before admission, Sister to 98 & 99.
116	M	36	,,	3		,, ,,	,,	Brother to 114. Secondary abscesses.
117	M	37	,,	3		Variola	,,	Re-vaccinated 1877
118	M	20	,,	3		,,	,,	
119	M	35	,,	3		,,	,,	Secondary abscesses
120	M	19	,,			Variola Modified	,,	
121	F	30	,,			,, ,,	,,	Re-vaccinated 12 days before admission.
122	F	49	,,	2 slight		Variola	,,	
123	F	46	,,	imperf.		Variola Confluent	Death	Alcoholic Subject. Delirium Tremens.
124	F	34	,,	6		Variola Modified	Recovery	
125	M	17	,,	1		,, ,,	,,	
126	F	35	,,	3		Variola	,,	
127	M	26	,,			,,	,,	
128	F	3	,,	4 imper.		,,	,,	
129	F	42	,,	3 ,,		Variola Modified	,,	
130	F	12	,,	3 good		,, ,,	,,	
131	F	12			Yes	Variola	,,	
132	F	29	,,	2		Variola Modified	,,	
133	M	52	,,			Variola	,,	
134	F	7			Yes	Variola Confluent	,,	
135	M		,,	2		Variola	,,	
136	M				Yes	,,	,,	
137	M		,,	3 slight		,,	,,	

From this Table the connection, from relationship, occupation, or chance contact, between a certain number of the cases may be seen, but in a considerable proportion there would seem to have been either a fresh introduction of infection from outside the town, or else the germs had been transmitted by means which at the time could not be discovered. A considerable number of cases could be directly traced to a certain mild case, where no medical assistance was called in, and the patient whilst in the eruptive stage, and before his removal to hospital, freely intermixed with the members of his family, and with his usual companions. There was considerable doubt—when the patient was eventually discovered—as to whether he and his relatives had not really been aware of the true nature of the illness, and the question of instituting a prosecution was seriously considered. There was a difficulty in bringing conclusive proof of wilful neglect, and accordingly the benefit of the doubt was given to those who would have been responsible. The removal of this patient to hospital was followed by the admission of a number of his relatives and friends, as well as by that of other persons to whom, there was good reason for believing, he had either directly or indirectly conveyed infection.

Altogether 99 cases of Small Pox were reported during the year, and of these 91—51 males and 40 females—were removed to hospital. The remaining 8 cases were allowed to remain at home, either because sufficient isolation could be there provided, or because there were circumstances connected with the case which rendered the patient's removal inadvisable or even dangerous.

Amongst the patients admitted to hospital, 6 deaths occurred, all being male adults who suffered from severe confluent attacks, and whose previous history and general mode of life rendered them from the first most unpromising subjects. Of the cases treated at home, 1 died, so that there were 7 deaths amongst the total of 99 cases reported during the year, thus representing a case mortality of 7·07 per cent. In hardly a single instance had a patient been protected by revaccination, and where this protection had been sought, it was after exposure to the risk of infection, and indeed after infection had actually taken place. In every such case the attack proved to be an exceedingly mild one, showing that the re-vaccination, though too late to confer absolute immunity, had exercised a marked effect in mitigating the severity of the disease.

A considerable proportion of the cases, especially amongst the children, were unvaccinated, a condition which accounts for their contracting the disease, and forms a fitting comment upon the present vaccination laws. As the outbreak advanced during the year, and even up to the present date, it has been remarkable how the number of cases furnished by the tramp class, and admitted from the Common Lodging Houses, has steadily declined, a condition attributable to the great amount of vaccination and revaccination carried out among persons of this class, both in the Lodging Houses and in the various Casual Wards throughout the country.

The measures adopted in combating the spread of Small Pox consisted in the removal to hospital—where possible—of each case as soon as it became known, and the simultaneous disinfection of the premises he had occupied, and of the persons with whom he had been in contact. Every effort was made to secure the revaccination not only of those persons occupying the same house, but also of those residing in the same Street or neighbourhood, as well as of all engaged in the same workshop or part of a Factory. In this respect the Vaccination Officers received very considerable help from the Sanitary Inspectors, and the latter in turn had every assistance from those employers of labour with whom they found it necessary to communicate. For about a month, from November 18th, the Sanitary Inspectors devoted the whole of the evenings to making house to house visits in those localities from which cases had recently been removed, and in endeavouring to induce all residents—who had possibly been exposed to infection—to take advantage of the protection which vaccination could alone offer. The results obtained—though considerable—were not altogether so satisfactory as might have been expected ; and it not unfrequently happened that a patient was subsequently admitted who acknowledged that the opportunity had thus been offered to him, and who regretted, when too late, that he had not had the good sense to avail himself of it.

The outbreak, as already stated, continued to the end of the year, and probably attained its maximum point in the month of December. At the beginning of that month, as the available accommodation was largely taken up, the Health Committee decided to reconstruct that portion of the Eastern wing of the Hospital which had been blown down by the severe gale of February 27th, 1903. The work, commenced by the Borough Surveyor on December 9th, was carried on, day and night, without intermission, and was completed on the 13th of the same month.

The forced nature of the labour necessarily increased the expense, but the result was very satisfactory, and additional accommodation was thus afforded for some 16 cases, besides an extra room, which can be utilized as a nurse's bedroom, or for cases requiring special accommodation. Although it has not been necessary to make use of this new Ward for the reception of patients, it has, during the Winter months, proved of great value as a drying room for the bedding and clothes, which in a Small Pox Hospital require to be so frequently changed.

The Hospital has been well and carefully looked after, and though only of a temporary and "make-shift" character, it has again during the past year done good service, by providing for the reception of patients who could not be efficiently isolated at home, and who would therefore have formed dangerous centres from which infection would undoubtedly have spread. I have again—as in last year's Report—the pleasure of alluding to the unfailing zeal and energy displayed by the whole of the Sanitary Staff in dealing with each case of Small Pox as it occurred. Many of these cases were brought to my notice on Saturday afternoons, on Sundays, or after regular office hours, but in no instance had I any difficulty in obtaining the assistance necessary to secure the patient's removal, and the immediate disinfection either of the whole of the premises, or at any rate of that portion which he had directly occupied. And in several instances, where the surrounding conditions were such as to furnish good grounds for fearing a wide-spread outbreak, the limitation of the infection to a single case was without doubt due to this prompt action of the Sanitary Officials.

The care and thoroughness with which the work of disinfection was carried out is evidenced by the fact that where a second case occurred in a house from which a patient had been removed, the date of such occurrence showed that infection must have been contracted before such removal, and therefore before disinfection of the premises.

In spite of close and frequent contact with the disease, no one connected with the Sanitary Department contracted infection, a satisfactory result which must be chiefly ascribed to the protective influence of revaccination, of which all had wisely availed themselves.

Judged by the amount of mortality, Small Pox was much more severely felt in several of the other large towns, Gateshead having a record of 34 deaths, London 25, Newcastle 18, Stockport and Oldham each 14, and Manchester 10; whilst amongst the smaller towns no less than 57 fatal cases occurred in Dewsbury, 9 in Ashton-under-Lyne, 5 in Barnsley, and 7 in Batley.

The deaths from Typhoid Fever numbered 29, and were somewhat below the total for the previous year, or for the average extending over the past 6 years.

As regards locality, Trinity and Deepdale were the Wards in which the greatest number of deaths took place, and it was in the first two months of the year that the greatest mortality was recorded.

In the interval from March to September very few deaths from this cause were registered, but with the Autumn months there came—as so frequently happens—an increase in the amount of sickness, and in the consequent mortality. The notifications relating to this disease amounted to 125 for the year, so that the case mortality slightly exceeded 23 per cent.

Scarlet Fever, though never entirely absent from the town, at no time assumed epidemic proportions, and as observed in recent years, the type of disease continued to be very mild. Out of the 105 cases reported, 8 terminated fatally, so that the deaths stood at the ratio of 7·62 per cent. of the cases of illness.

Measles, which were present in epidemic form at the close of 1903, continued without any marked abatement until towards the end of March, 1904, and a total of 87 deaths, all, with two exceptions, under the age of 5 years, resulted from this cause.

In consequence of the serious and wide-spread nature of the outbreak, the Public Schools were closed after the Christmas holidays until February 1st, and the order was then extended from that date for another fortnight. After this a marked improvement took place, and the epidemic was practically over, only 2 further deaths occurring during the remainder of the year. Although the epidemic appeared to reach all parts of the town, the greatest mortality was recorded in St. John's, St. Peter's, Park, and Fishwick Wards, the first named district contributing almost one-fourth of the total number of deaths.

Whooping Cough, which so frequently follows in the wake of Measles, was present, though not to any great extent, throughout the year; a decided increase as regards the amount of sickness from this cause being apparent during the last three months.

Like Measles, this is a disease the fatality of which stands in inverse ratio to the age of the children affected; and of the 30 deaths all with one exception occurred in children under the age of 5 years.

Diphtheria never assumed anything like an epidemic form, 73 cases of sickness being notified during the 12 months, of which 21 terminated fatally, representing a case mortality of 28·76 per cent. In some instances an examination of the patient's home revealed conditions to which the attack might very probably be attributable, but in others no cause of a definite character could be ascertained. In several of the fatal cases the disease ran a very rapid course, death taking place in some instances even before notification, but in very few cases did the infection spread to a second member of the same household.

Diarrhœa occasioned 141 deaths, a number higher than that for the preceding twelve months, but one which compares favourably with the average for previous years. Towards the middle of July, the earth temperature, at a depth of four feet below the surface, had reached the critical point of 56 degrees, and this was followed by the appearance of Infantile Diarrhœa, but not to any great extent, nor was the illness severe in character, or very fatal in its results. The beginning of August also passed without any very great increase in the mortality from this cause, but the latter half of that month, and the first three weeks of September, witnessed a decided accession, both as to the number of infants affected, and as to the consequent mortality.

In the four weeks ending September 17th, 50 deaths from Diarrhœa were recorded, and of this number 33 occurred in the last fortnight. The Chart, which as usual is appended to this Report, shows, amongst other things, the wave of Diarrhœal mortality, its connection with the rise in the earth temperature, and the lateness in the season, as compared with other years, when the maximum point was reached. As usual, the great majority of the victims were infants or young children, 111 of the deaths being registered under the age of twelve months, whilst of the remaining 30, only 8 were persons of adult age. St. John's, Fishwick, Trinity, Park, and Maudland Wards showed the heaviest mortality from this cause, in proportion to their population, but in these districts the birth rate was somewhat in excess of that for the whole of the town. Taking the whole of the population, the mortality from Diarrhœa equalled 1·43 per thousand, a rate which was exceeded in West Ham, Hull, Liverpool, Salford, Wolverhampton, Birmingham, and Burnley, as well as in several of the smaller towns.

The deaths of 10 children resulted from Croup, a number below the average of former years.

Consumption accounted for 124 deaths, a number very much in accord with that returned in previous years. The majority of these deaths occurred between the ages of 15 and 40 years, and were generally distributed throughout the town. So far there has been no movement towards providing a Sanitorium for the treatment of Consumptive patients residing within the Borough. In some few cases admission has been obtained into Sanatoria established elsewhere, and with satisfactory results. There can be no doubt that in the early stages of the disease, residence in a pure atmosphere, combined with perfect rest, good feeding, and judicious treatment may do much good, and may even result in permanently arresting the disease, and so effecting a cure. But such treatment must necessarily entail great expense, and the attention of Health Authorities should first of all be directed towards securing for the every-day life of the people conditions least likely to assist in the production or development of this disease—a disease especially prevalent and fatal amongst crowded communities.

Fresh air, sunlight, pure water, and efficient ventilation and drainage, not only in the houses, but also in the mills, workshops, and factories, all combine to oppose the inroads of Consumption, but these, which can be provided and controlled by the Municipal Authorities must be supplemented by the efforts of the people themselves, who by gradual education will learn to appreciate the dangers of ill-assorted marriages, of crowded bedrooms, of intemperance, and indeed of all those conditions which lower the vital stamina, and so prepare the body for the reception of the Tubercular poison.

Once let it be clearly understood that the germs of Consumption are given off from the breath, and dried expectoration of a patient, and surely it may be expected that greater care will be exercised as to avoiding sources of infection, and especially as to allowing children to occupy bedrooms contaminated in this manner ; whilst the patient will surely desist from spreading disease by the beastly habit of indiscriminate expectoration.

These are subjects which come within the range of common sense, and yet it is no uncommon sight in the houses of the poorer classes to find bedrooms occupied by a consumptive patient, as well as by other members of the family, the floor and walls of which are covered and festooned by matters coughed up from the infected lungs.

There are many diseases which could and should be more generally avoided, and from which children especially should and would be safeguarded, if they only inspired the same feeling of fear that Small Pox does, and if the Public would only recognize the fact that for every death occasioned by the last named disease hundreds annually occur from these other affections, so lightly thought of, so little feared, and yet so much more deadly in their results. There are certain diseases which are classed as "preventable," but there are many more cases of disease which might be prevented if the head of each house would give more thought as to the condition of the home, and the wellbeing of his family and the household.

Under the headings Bronchitis and Inflammation of the Lungs are included all the chief forms of Respiratory disease, other than Consumption, and these were the respective causes of 278 and 121 deaths ; the total 399 being somewhat higher than that from the same causes during any of the three preceding years, but below an average extending over the past 6 or 10 years. In addition to dealing with the Diarrhœal mortality, the appended Chart shows the inverse relationship between the general temperature and the death rate from Bronchitis, and how a fall or rise in the former is followed by a rise or fall in the Bronchial mortality.

From such diseases as Teething, Premature Birth, and Debility 415 deaths were recorded, of which 330 were those of infants under the age of 12 months. The total number of deaths occurring throughout the year in children, before the completion of the first year of life, was 609, and judged by its relationship to the Births, this number shows that out of every 1000 children born 183 failed to attain the age of 12 months. This figure is somewhat higher than that for the previous year—156—but still shows a decided improvement over that of former years, 220 being the average for the past 10 years.

Improved sanitation, and increased knowledge amongst the working classes as to the nursing of young children have no doubt had much to do in bringing about this more satisfactory condition, but it must be remembered that the past two years have been, in their climatic conditions, exceptionally favourable as regards Infantile Diarrhœa, and this may not again be the case for some years to come, and therefore the present rate of progress may not be invariably or regularly maintained.

The deaths of 112 old people were attributed to gradual decay, and a natural wearing out of the organs and tissues of the body, without the presence of any actual disease.

From Violence, chiefly street and machinery accidents, with 13 cases of Suicide, 57 deaths resulted, and of these a considerable number occurred in the Royal Infirmary, to which institution the sufferers had been removed.

The remaining deaths, 642 in number,.are grouped together as Other Diseases, in as much as they do not come under any of the headings already dealt with. But information as to their exact nature, as well as to the ages and localities in which they occurred, is given in Table 4A.

Altogether throughout the year, and from all causes, there was recorded a total of 2091 deaths, equal to a rate of 17·83 per 1000, calculated upon a population of 115,055, the number estimated by the Registrar-General to be living in the town about the middle of the year.

The Births for the same period numbered 3314, the rate per thousand—28·26—being absolutely the lowest in the reliable records of the town. The natural increase, represented by the excess of Births over Deaths, amounted to 1223 lives, and this number—owing to the reduction in the death rate being even greater than that in the birth rate—compares very favourably with the increase observed in the majority of past years. For several years reference has been made to the reduction in the birth rate, and to the fact that it was generally observable throughout the country, and there has been no improvement during the past 12 months, since almost without exception, in towns both great and small this diminution has continued.

Table No. 6 shows at a glance the estimated population, the number of Births and Deaths, and the respective rates, as well as the natural increase for each year since 1840; and while the reduction in the mortality, especially of late years, is a pleasing feature, it is equally unsatisfactory to note the marked falling off in the number of Births, and to know that this loss is a national one.

Further information with regard to every detail of the Vital Statistics of the town will be found in Tables Nos. 1 to 8, in those marked 1a, 2a, 3a, and 4a, prescribed by the Local Government Board, and in the Plans and Chart, which as in former years form the supplement to this Report.

Tables 9—16 give details of the work which has been done by the Sanitary Inspectors and the Female Health Visitors during the year.

In each of the four Districts, the attention of the Inspectors has continued to be given to the conversion of privies to waterclosets, the abolition of all ashpits, and the flagging of the yards. These are measures which above all others are likely to have a good effect in improving the health and comfort of the townspeople, and what has been done during the past twelve months is but a continuation of the policy which for many years past has been steadily pursued. The evils connected with the privy-midden system, and with the imperfect paving of yard surfaces, have been so frequently referred to in former Reports, and are now so generally recognized, as to render further description unnecessary. In the case of many of the evils connected with the structural condition of an old town, improvement—short of demolition and reconstruction—is impossible, since they depend upon the crowding together of houses, and the gradual encroachment in subsequent years upon yard areas which from the first were too small and confined. But limited as is the size of so many of these yards, great improvement can be effected by clearing out the existing filth receptacles—which frequently form a continuous line extending for the whole length of a street, between the backs of two rows of houses—and substituting waterclosets and ashpails. When in addition to these, the yards are covered with closely fitting flags, which, unlike the previous pebble pavement, do not allow of the soakage of liquid matters into the soil below, the condition of things is very materially changed, and it becomes the duty of the tenant to take full advantage of the improvement, to prevent wilful damage, and to see that nothing offensive remains in the neighbourhood of his dwelling.

The Map showing the parts of the town which have been improved during the past years is as usual appended to this Report, and from this it will be seen that, so far as the conversion to water carriage is concerned, the bulk of the work has now been done, and the town no longer ranks with those retaining the privy-midden system. The power to require yards to be covered with flags or some equally impermeable substance has only been acquired in 1900, and therefore the improvements in this direction have not advanced so rapidly.

The work of examining and improving the closet accommodation at the various mills, in which so large a proportion of the population gain employment, has been continued throughout the year, and with satisfactory results.

In the case of the older mills the closets originally provided were of a most insanitary description, small, dark, illventilated and communicating with an offensive cesspool, which in many instances extended under the floor of the closet itself.

Years ago improvements were effected in this direction, at any rate to the extent of substituting some form of watercloset—such as Macfarlane's troughs—for the privies, and filling up the offensive cesspool.

But the closets themselves remained cramped as regards space, and in most instances opened directly out of the workroom, while in the course of time the surface of the iron trough became rough, corroded, and very difficult to keep clean. Where possible, these troughs have been superseded by strong, plain, pedestal closets, each in its own separate compartment, and each provided with a cistern capable of giving a 3-gallon flush whenever it is used.

The Factory and Workshops Act, 1901, deals with the question of conveniences in Factories and Workshops, and an Order subsequently issued by the Secretary of State defines the number that must be provided in proportion to the number of persons employed; and though, owing to the adoption by the Town Council of Section 22 of the Sanitary Improvement Act of 1890, the first named Act is not operative in Preston, it was still decided to adhere to the numbers as defined in the Order of February, 1903. It was therefore necessary as regards several of the mills to increase the existing amount of accommodation, and in such cases advantage was taken of the opportunity to reconstruct, or otherwise improve, that already in use. In many cases the required alterations have been completed, in others the work is at present in progress, in a few for various reasons commencement has been delayed, whilst some two or three still remain to be examined and dealt with. Both Mill Owners and Managers continue to show a disposition to comply with all reasonable and legitimate requirements, and to assist the Health Authority in its efforts to improve the health, and increase the comfort of the operatives employed. I can only again express the hope that the latter will appreciate the improved conditions, will recognize the trouble and cost entailed, and will abstain from wilfully or carelessly damaging what is essentially for their own benefit.

A separate Table—No. 10—gives a summary of what has been done under the Factory and Workshops Act with a view to improve the conditions under which the various forms of employment are carried on, and in the succeeding Table—No. 11—these employments are set forth in condensed form.

Of late years much has been done to reduce, or even abolish, the dangers and accidents connected with certain dangerous trades, but, in addition to this, every year and throughout the whole country, a great deal is being done to enable ordinary employments to be carried out under much more sanitary conditions than was formerly the case.

In Table No. 12 is summarized the main features of the work accomplished by the two Female Health Visitors during the past year.

I have before pointed out that it is impossible within the limits of an ordinary table to do more than classify the condition of the houses visited under such arbitrary headings as "Clean" or "Dirty," but it will be understood that many varying gradations are met with, and that the size and circumstances of each family must be considered. Again in the case of visits made to "Births," and "Deaths from Diarrhœa," the nature of the feeding depends in a great measure upon the age of the child at the time the visit was made; since though nearly all are "Breast Fed" for a short time after birth, the number rapidly diminishes with each succeeding month, or even week, of the children's lives.

Still the main fact remains that a great many visits are made to houses in which there are young children, and that much valuable instruction is given not only as to the care, feeding, and nursing of such children, both in sickness and in health, but also as to the necessity for cleanliness and order in the management of the household. Another, and an important, part of the Health Visitors work has been that of visiting the more common forms of Infectious disease met with amongst the children attending the various schools. Some of these, like Measles and Whooping Cough, though as a rule little feared by parents, help each year to swell the bills of mortality; while others, as Chicken Pox, Mumps, Ringworm, &c., are troublesome, and easily spread, though, of course, rarely fatal in their results. Still, it is desirable that parents should understand that these are all infectious diseases, and as such are liable to be transmitted from one child to another, and that it is therefore a part of their duty to safeguard, so far as they can, both their own children, and those of other people, from unnecessary exposure to the risk of infection. Since the diseases in question are not included in the list dealt with by the Compulsory Notification Act, it has been necessary to obtain information of their existence in other ways; in the case of children above the age of five years, by lists obtained from the School Attendance officers, and in the case of younger children—who especially suffer from such affections—by information furnished by the Teachers of the Infant Schools.

As this arrangement is only in the initiatory stage, I shall not deal with it further in the present Report, beyond saying that, in addition to the visiting entailed, it greatly increases the amount of office work, and so demands an increase in the already overworked Clerical Staff of the Health Department.

The Midwives Act, 1902, has also been the cause of a great amount of additional work, since the Town Council, as the Local Supervising Authority, deputed to the Health Committee and its Officials the duty of seeing that the various provisions of the Act are duly carried out. With a view to assist those women who desired to be placed upon the Register, and after the provisions of the Act had been advertised and placarded throughout the town, I gratuitously distributed to all who made application at the Health Office a book which not only gave explicit directions upon all points, but also contained all the forms necessary for use in making application to the Central Midwives' Board in London.

Very frequently, since many of the women are illiterate, or of imperfect education, the forms in question were filled in by the Chief Clerk, so that all that remained to be done was to obtain the signature of the person who testified to his knowledge of the applicant, her good character, and previous experience. In all, 53 women intimated their intention of practising within the Borough area, and were accordingly placed upon the local Register; and of these, four produced certificates from some recognised institution, whilst 49 relied upon the fact that they had been in actual practice as midwives for at least one year at the time of the passing of the Act. The time limit for registration expired on April 1st, 1905, and as yet it is too soon to say much as to the working of the Act, and its ultimate results. It is no doubt intended to weed out a number of ignorant, careless, and therefore undesirable practitioners, and it certainly will have this effect if the provisions relating to the recording of the various stages and incidents of each confinement are strictly enforced. At any rate, it will have the effect of bringing the midwives, as a body, under the supervision and control of the Health Authority, who, as regards the midwife, can enforce strict cleanliness of person, dress, and utensils, and so reduce the risk of infection as regards the patient. As a preliminary measure, and, in order to impress upon the body of midwives generally the importance of this cleanliness in everything relating to themselves or their patients, I issued to all who were upon the local Register the following short notice :—

Corporation of Preston.—Health Department.

Under the Midwives Act, 1902, increased responsibility rests upon all women who in future practise as licensed Midwives.

Where a Medical Practitioner is in attendance, her duty is to carry out thoroughly and entirely such directions as he may give.

Where no Doctor has been called in, the care of both the patient and the newly-born infant rests upon her shoulders.

Her first care should be that absolute cleanliness is preserved. Cleanliness not only with regard to her own person, clothing, and instruments, but also with regard to her patient, the sick room, and the newly-born child,

If—for sufficient reasons—the infant cannot be altogether, or can only in part be suckled, it should be fed upon milk alone. Care should be taken that this is kept sweet and clean, as are also the bottles or other utensils used.

Cows milk, sweetened and diluted with water, so as to make it resemble as nearly as possible that from the mother's breast, should be used.

Where any difficulty occurs during labour, or the condition of the patient afterwards is not perfectly satisfactory, Medical assistance should at once be obtained, and the Midwife should report the case to the Medical Officer of Health, at the Health Office, Tithebarn Street, from 10 to 10-30 a.m.

H. O. Pilkington,
Medical Officer of Health.

The Canal Boats have been regularly inspected throughout the year, and the following Report, which in accordance with the requirements of the Canal Boats' Acts, 1877 and 1884 has already been forwarded to the Local Government Board, gives a description of the number and condition of the Boats now working upon this section of the Preston, Lancaster, and Kendal Canal :—

County Borough of Preston.

CANAL BOATS ACTS of 1877 & 1884.

I beg to submit the following Report for the year 1904, dealing with that portion of the Preston, Lancaster and Kendal Canal, situated within the boundaries and jurisdiction of this Sanitary Authority.

As in previous years, the work of inspection has been carried out by Sanitary Inspector Henry Livesey, and upon the same terms, no special remuneration being provided for this portion of his duties.

No new Boat has been registered during the year, and as one—The Lily, XXI—has been broken up, and the certificate returned to this Authority, the number now remaining on the Register is 34, or one less than the number for the preceding year.

All the Boats have been inspected during the year, as also have several, registered by the Lancaster Authority.

As a result of this inspection, infringements of the Regulations were found to be existing on 6 of the Boats, the total number of infringements being 9, the nature of which is shown on the appended Supplement. The defects thus found were remedied at the Inspector's request, so that in no instance was it necessary to have recourse to legal proceedings.

In 2 additional cases, complaints from other Authorities were investigated, and after the completion of the necessary work, the usual notices were signed and returned.

At no time was any opposition offered to the Inspector in the performance of his duties.

The total number of persons found occupying the Boats was 257, of whom 140 were male adults, 64 female adults, and the remaining 53 children. No children of school-going age were found upon any of the Boats.

No notification of Infectious disease upon any Boat was received during the year, nor was any suspicious case met with by the Inspector in the course of his visits.

The general condition of the Boats was clean and satisfactory,

H. O. PILKINGTON,
January 23rd, 1905. Medical Officer of Health.

Apart from the constant supervision of the inmates of the Common Lodging Houses, rendered necessary by the possible introduction of Small Pox, the houses themselves have received regular attention, and have been kept in as good and cleanly a condition as the defective structural condition of many of them will permit. The larger buildings, which have been erected, or re-constructed for the specific purpose of being used as Lodging Houses are better, and more satisfactory to deal with, than the smaller establishments, which in many instances are nothing more than one or two cottage houses thrown together. Since however these latter would in any case be used as Lodging Houses, it is better that they should be registered, and so brought under the control of the Police and Sanitary Inspectors..

Advantage has been taken of any change of ownership or tenancy to secure all possible improvements, and so their present condition, unsatisfactory as it still remains, is better than in former years.

Proceedings were instituted against the tenant of a large building, the ground floor of which was used as a cheap restaurant, whilst the upper rooms were filled with beds, let out upon nightly payments to casual customers.

The proprietor refused to apply for registration, although the place was in all respects a Common Lodging House. This was proved to the satisfaction of the magistrates, who inflicted a fine of £3 and costs. Since then the place has changed hands, has been materially improved, and now stands on the list of Registered houses.

Such private Slaughterhouses as remain in the town, the Abattoir at the Cattle Market—now becoming each year better appreciated and more generally used,—and the various Markets, have all received regular attention and supervision throughout the year, and Inspector Marsden's work in this direction is briefly summarised in Table No. 13. The meat examined and destroyed was in every instance voluntarily submitted, the amount—94,137 lbs.,—being somewhat below the amount dealt with in the preceding year. To the 4,018 lbs. of Fish included in this Table must be added some 15,000 lbs. examined and destroyed by Inspector Livesey at the Wholesale Fish Market.

Under the Food and Drugs Adulteration Act, samples to the number of 264 were purchased, and submitted to examination by the Public Analyst. The articles—of which a detailed list is given in Table No. 15—consisted chiefly of Milk, Butter, Bread, Coffee, and Lard, together with certain Spices, Condiments, and some Spirits. Out of the total number examined, 24 were found to be adulterated, in some cases to such an extent as to call for further proceedings, in others so slightly as not to interfere with the real value of the article, whilst in a few it was deemed sufficient that a cautionary letter should be addressed to the vendor from the Town Clerk's Office.

In accordance with the action taken in many other towns during the past year, 19 samples of Brandy were purchased at different Public Houses. Out of this number seven were returned as genuine; the other 12 failed to show the distinctive characteristics of true Brandy, and were found to consist entirely of—or to be largely adulterated with—neutral grain spirit, the product of repeated distillation in a patent still. A prosecution followed in 8 of these cases, and in 5 of them convictions were obtained, followed by fines varying in amount from £2 to £5, with costs.

In two cases, which came up for hearing on the same day, an error had occurred in serving the copy of the Analyst's certificate upon the wrong defendant, and, in consequence, one case, which had been opened, was dismissed, whilst the other was at once withdrawn by the prosecution, an application for the defendant's costs being refused by the Court. It may be that the majority of persons who ask for Brandy at an ordinary Public House do not expect to be served with "Cognac" at the price paid, and therefore suffer no loss; but, on the other hand, it may be wanted in cases of accident, or urgent sickness, when a powerful, diffusible stimulant—easily digested and rapidly absorbed—is necessary, and then the compound sold may not only fail in its intended purpose, but is likely to cause actual harm. A definite pronouncement from the Authorities at Somerset House as to what is, and what is not, "Brandy," would probably be welcomed by buyers and sellers alike, and certainly would enable a Sanitary Authority to continue its work in this direction with greater confidence and satisfaction.

In but few instances, in addition to the cases already mentioned, was it found necessary to take legal proceedings in order to enforce compliance with the laws relating to sanitary matters.

A summons for removing offensive matter through the streets during the hours of day time resulted in the imposition of a fine of 20s. and costs. A more serious case was that in which a manufacturer was charged with carrying on a business causing an effluvium nuisance, without the consent of the Corporation. The proceedings were successful, and resulted in a fine of 10s. and costs, but, upon an appeal at the following Quarter Sessions, the magistrates decision was reversed, and costs granted to the appellant.

The business in question had for a long time caused an intolerable nuisance, perceptible not only in the immediate neighbourhood of the works, but even at a considerable distance, and it now remains to be seen if the appliances which have been adopted, will, or will not, be successful in preventing a recurrence.

Summonses were taken out against three owners of property for failing to comply with notices requiring the limewashing of certain cottages. In two cases fines of 10s. and 5s. were respectively imposed, with costs, while the third was withdrawn upon payment of costs, the work having then been put in hand.

As in former years, the want of an Isolation Hospital, to which patients suffering from infectious disease, other than Small Pox, could be removed, was severely felt ; and there is no doubt the spread of disease to other members of a household could have been prevented in several instances, had such accommodation been available for the first case affected. In one household, five children were consecutively attacked with Scarlet Fever, and 2 deaths resulted ; whereas the prompt removal of the first patient might have cut short the outbreak.

There were several instances where Typhoid Fever was transmitted to other members of the patient's family, and in an ordinary cottage house satisfactory isolation of such a disease is practically impossible, since if even the patient can have a separate room, some part at least of the nursing is done by persons who mix with the rest of the family, and who very frequently prepare their food. In many cases, where the breadwinner of a family was struck down by disease, it became necessary to supply the household with the means of subsistence, since the Union Authorities refuse to recognize any responsibility where the case is one of infection, and therefore to my duties as Medical Officer of Health I have had to add those of Relieving Officer. In addition to providing for the household necessities, it has, in not a few instances, been requisite to supply nursing assistance, and in doing this I have had valuable assistance from the Sanitary Inspectors on account of their local knowledge of the circumstance and surroundings of each case. But all this is but a poor substitute for a well appointed hospital, and it is satisfactory to know that another obstructive formality has been overcome, and another advancing step made towards the erection of an Infectious Hospital for the town. Indeed I still hope that in the course of another decade or two—perchance from an (Electric) Bath Chair, with blurred vision, and imperfect understanding—I may yet see the opening ceremony.

During the whole year the town has enjoyed the benefit of a water supply, constant, abundant, pure in quality, and well adapted for all domestic purposes. Progress is also being made with works which will extend the area of the gathering ground, increase the storage capacity of the reservoirs, and still further ensure the purity and abundance of the supply.

Another matter which does not actually come under the control and direction of the Health Authority, but which has a direct bearing upon the appearance, and sanitary condition of the town, is the sett-paving of the streets and back passages, and the flagging of the footpaths. This has been vigorously carried out, and paving to the extent of 83,700 yds., and flagging—13,400 yds. has been completed during the year.

The new steam Disinfector, erected in a building adjoining the Destructor Works on the Moor, is now completed, but as yet has not been taken over by the Health Authority, or put into active service.

In July, in company with your Chairman, Dr. D. W. Brown, I attended the Health Congress of the Sanitary Institute held in Glasgow. I had then the opportunity of learning much from a City, well known for its Municipal enterprise and progress, and at the same time of seeing much which served to reconcile one, more than ever, with the condition of Preston.

H. O. PILKINGTON,

Medical Officer of Health.

PORT SANITARY.

The return of work done by Inspector Baron as Inspector under The Port Sanitary Authority is shewn in Table No. 16. While there is an increase in the number of steamships examined, the re-inspections show a diminution, due to the fact that many of these vessels return to the Dock and River at more or less regular intervals, and since their condition is well known, frequent re-inspections are unnecessary.

Defects of various kinds to the number of 142 were discovered, the majority of these being due to a want of care on the part of the crew, and therefore of such a nature that for their remedy structural alterations were not required. Still they are matters which possibly may affect the health, as certainly they do the comfort, of those on board the ship, and their removal, which in each case followed upon the representation of the Inspector, must therefore be a distinct advantage.

Only one serious case of illness came under observation, that of a seaman on board the s.s. "Moctah," which came into Dock on September 9th, bringing a cargo of deals from Canada. This man was suffering from Typhoid Fever, and his condition was such as urgently to demand his removal to hospital. In this instance the want of an Isolation Hospital was acutely felt, since there was absolutely no provision in the town for the treatment of such a patient. Nor was much time available for making other arrangements, for it was expected that the cargo would be discharged, and the boat sail by the tide of the same night, or the following morning.

It was obviously unfair to allow the man to remain in the dark, ill-ventilated, forecastle, while the crew also objected to sail with the patient on board. After some difficulty I arranged for his removal to the Fylde Joint Infectious Hospital, situated at Wrea Green, and this was accomplished the same night in an ambulance sent down from the Hospital. After a severe illness, lengthened by certain complications, the man was eventually discharged restored to good health.

Beyond this nothing of importance has occurred in connection with Port Sanitary matters.

H. O. PILKINGTON,
Medical Officer of Health,
Port Sanitary Authority.

TABLE No. 1.

Number and Causes of Death at different Ages, for the Year (53 weeks) ending 31st December, 1904.

Cause of Death.	Under 1 Year.	1 to 5	5 to 15	15 to 25	25 to 65	65 and over.	Total.	Corresponding year 1903.	Corresponding year 1902.	Corresponding year 1901.	Average for six years.
Small Pox	..	..	..	..	6	1	7	2	..	..	1·50
Fever	..	..	5	7	16	1	29	35	21	24	31·66
Scarlatina	1	5	2	..	..	..	8	14	20	86	28·50
Measles	30	55	1	..	1	..	87	89	54	31	70·50
Diarrhœa	111	21	1	..	4	4	141	103	154	200	182·50
Whooping Cough	12	17	1	..	..	..	30	61	25	37	45·00
Diphtheria	2	12	6	..	1	..	21	23	17	17	26·00
Croup	3	5	2	..	..	..	10	14	15	8	16·66
Consumption	..	2	8	30	77	7	124	110	115	116	126·50
Bronchitis	92	19	1	1	81	84	278	209	270	258	283·16
Inflammation of Lungs....	18	22	4	12	47	18	121	119	120	135	134·16
Teething, Premature Births and Debility	330	79	6	..	..	..	415	397	386	485	474·16
Old Age	..	..	..	..	9	112	121	110	105	103	104·16
Violence, &c.	2	9	2	7	30	7	57	64	55	64	58·83
Other Diseases	8	10	30	46	373	175	642	605	641	649	647·50
Total..........	609	256	69	103	645	409	2091	1955	1998	2213	2230·79

TABLE No. 2.

Number and Causes of Deaths in each Month of the Year ending (53 weeks) 31st December, 1904.

Cause of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Small Pox	...	...	...	...	...	...	...	...	2	2	...	3	7
Fever	5	8	1	2	...	3	...	...	3	4	1	2	29
Scarlatina	1	...	...	1	3	1	...	1	1	...	...	...	8
Measles	67	15	3	...	...	...	...	1	...	...	1	...	87
Diarrhœa	2	1	...	1	1	3	6	26	64	29	7	1	141
Whooping Cough	1	...	..	2	...	2	1	...	5	2	3	14	30
Diphtheria	4	4	...	2	1	...	...	2	1	1	...	6	21
Croup	2	...	3	...	1	...	...	1	1	...	1	1	10
Consumption	18	12	12	14	11	4	6	7	11	8	10	11	124
Bronchitis	44	24	37	29	13	17	9	3	14	10	25	53	278
Inflammation of Lungs	25	9	16	9	10	13	8	6	3	6	8	8	121
Teething Convulsions, &c.	57	34	42	29	20	31	22	28	41	42	27	42	415
Old Age	12	9	12	16	12	7	5	7	8	8	8	17	121
Violence, &c	8	7	5	5	2	8	7	3	4	1	4	3	57
Other Diseases	76	50	60	49	48	48	47	51	59	40	46	68	642
Total	322	173	191	159	122	137	111	136	217	153	141	229	2091

TABLE No. 3.

Number and Causes of Deaths in each Ward for the Year (53 weeks) ending 31st December, 1904.

Wards.	Small Pox.	Fever.	Scarlatina.	Measles.	Diarrhœa.	Whooping Cough.	Diphtheria.	Croup.	Consumption.	Bronchitis.	Inflammation of Lungs.	Teething, Premature Births, & Debility	Old Age.	Violence, &c.	Other Diseases.	Total Deaths.	Rate per 1000 per annum.	Total Births.	Rate per 1000 per annum.	Population.
St. John's Ward ..	..	2	3	21	19	2	..	1	8	30	13	45	14	6	68	232	19·94	346	29·75	11630
Avenham Ward ..	..	2	..	3	1	1	..	..	6	18	9	9	8	3	56	116	15·54	141	18·89	7462
Christ Church Wd.	..	..	..	3	10	..	..	1	10	12	6	35	8	1	37	123	13·84	271	30·49	8887
Ashton Ward ..	..	1	..	1	4	3	5	2	7	18	12	25	7	2	48	135	17·31	235	30·13	7798
Maudland Ward ..	..	..	1	6	14	2	3	..	10	22	8	27	11	7	35	146	18·46	224	28·32	7908
St. Peter's Ward..	..	..	2	12	10	4	5	..	16	37	7	41	7	..	39	180	16·63	346	31·98	10820
Moor Brook Ward	..	4	..	4	10	4	1	..	11	19	11	32	11	..	49	156	16·93	239	25·95	9210
Park Ward ..	1	2	1	12	19	4	3	4	13	34	15	66	15	4	78	271	18·21	447	30·04	14880
Trinity Ward ..	..	6	..	5	20	6	..	..	8	35	17	39	9	5	68	218	19·24	323	28·50	11330
Deepdale Ward ..	..	6	1	5	9	3	2	1	15	24	11	43	10	3	54	187	20·50	301	33·00	9120
Ribbleton Ward ..	..	3	..	6	9	..	1	..	12	15	3	29	12	6	43	139	16·10	212	24·56	8630
Fishwick Ward ..	..	3	..	9	16	1	1	1	5	12	8	18	9	3	23	109	14·76	227	30·76	7380
Gaol, Infirmary, &c.	6	..	..	..	..	..	..	..	3	2	1	6	..	17	44	79	..	2	..	..
Total........	7	29	8	87	141	30	21	10	124	278	121	415	121	57	642	2091	17·83	3314	28·26	115055

Death Rate per annum, per 1000 of the Population for the Year..............17·83
Average Death Rate per annum, per 1000 of Population, for six years........19·31
Do. Do. 10 years........19·85
Death Rate per annum, per 1000 of Population, of Children under one year.... 5·29
Per centage of Deaths under one year to total Deaths for the Year...........29·12
Do. Do. for 10 year.............33·40

TABLE No. 4.

Number of Deaths in each Ward during each Month of 1904.

WARDS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
St. John's Ward	43	21	25	15	14	22	5	15	31	13	11	17	232
Avenham Ward...............	15	11	11	13	4	11	6	7	8	6	9	15	116
Christ Church Ward.........	17	3	10	7	9	8	12	7	19	10	7	14	123
Ashton Ward	17	15	14	9	8	11	6	8	14	7	10	16	135
Maudland Ward	15	9	6	11	12	9	13	8	21	12	13	17	146
St. Peter's Ward	32	15	22	23	12	14	10	7	9	10	9	17	180
Moor Brook Ward	25	10	14	9	12	13	9	12	8	17	8	19	156
Park Ward	45	23	28	11	14	14	15	16	33	21	17	34	271
Trinity Ward	34	20	13	16	9	13	9	24	21	18	20	21	218
Deepdale Ward...............	31	17	19	18	7	6	9	10	19	16	15	20	187
Ribbleton Ward	21	11	18	9	9	7	5	11	14	11	10	13	139
Fishwick Ward	18	12	8	9	6	3	7	8	11	3	8	16	109
Gaol, Infirmary, &c.	9	6	3	9	6	6	5	3	9	9	4	10	79
Total	322	173	191	159	122	137	111	136	217	153	141	229	2091

TABLE IA.

Vital Statistics of Whole District during 1904 and Previous Years.

Year.	Population estimated to Middle of each Year.	Births.		Deaths under 1 Year of Age.		Deaths at all Ages. Total.		Total Deaths in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District. (Workhouse.)	Deaths at all Ages. Nett.	
		Number	Rate*	Number	Rate per 1,000 Births registered	Number	Rate*			Number	Rate*
1894.	111,425	3545	31·81	770	217	2186	19·61	56	129	2315	20·77
1895.	112,638	3702	32·95	927	249	2528	22·44	81	161	2689	23·87
1896.	113,864	3673	32·25	760	204	2191	19·24	58	151	2342	20·56
1897.	115.103	3687	32·03	954	263	2687	23·34	63	166	2853	24·78
1898.	116,356	3559	30·58	812	221	2107	18·10	81	138	2245	19·29
1899.	117,622	3492	29·68	889	255	2492	21·18	85	181	2673	22·72
1900.	118,902	3410	28·67	814	236	2636	22·16	66	200	2836	23·85
1901.	113,117	3418	30·21	737	218	2213	19·56	75	149	2362	20·88
1902.	113,766	3278	28·81	618	188	1998	17·56	61	144	2142	18·82
1903.	114,404	3453	30·18	541	156	1955	17·08	66	135	2090	18·26
Averages for years 1894-1903	114,719	3521	30·71	782	220	2299	20·02	69	155	2454	21·38
1904.	115,055	3314	28·26	609	183	2091	17·83	79	149	2240	19·10

* Rates calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water) 3,721.

Total population at all ages 112,982
Number of inhabited houses 24,194
Average number of persons per house 4·66
At Census of 1901.

TABLE 2A.

Vital Statistics of separate Localities in 1904 and previous years.

Localities.	1901				1902				1903				1904			
	Population estimated to middle of year.	Births registered	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of year.	Births registered	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of year.	Births registered	Deaths at all Ages.	Deaths under 1 year.	Population estimated to middle of year.	Births registered	Deaths at all Ages.	Deaths under 1 year.
St John's Ward ...	11409	378	212	65	11495	354	217	71	11555	373	193	59	11630	346	232	64
Avenham Ward......	7363	132	110	22	7394	101	82	13	7422	135	91	16	7462	141	116	14
Christ Church Ward.	8753	254	159	48	8787	239	147	42	8837	269	137	48	8887	271	123	48
Ashton Ward.........	7688	210	98	33	7728	205	109	26	7758	231	110	32	7798	235	135	39
Maudland Ward......	7783	213	130	50	7823	238	138	44	7873	227	125	38	7908	224	146	49
St. Peter's Ward ...	10597	352	213	67	10655	324	176	61	10735	383	201	63	10820	346	180	64
Moor Brook Ward...	9080	315	183	78	9119	264	138	47	9167	258	153	42	9201	239	156	44
Park Ward............	14592	492	290	124	14701	482	265	91	14791	490	280	81	14880	447	271	80
Trinity Ward.........	11098	338	243	66	11185	319	249	83	11267	318	202	50	11330	323	218	71
Deepdale Ward	8986	272	156	62	9020	284	149	51	9060	281	129	30	9120	301	187	55
Ribbleton Ward......	8506	266	201	68	8547	248	144	54	8597	275	159	56	8630	212	139	37
Fishwick Ward	7262	195	143	50	7302	196	123	35	7324	212	109	24	7380	227	109	39
Public Institutions...	...	1	75	5	...	5	61	4	...	1	66	2	...	2	79	5

TABLE 3A.

Cases of Infectious Disease notified during the Year 1904.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.													
	At all ages.	At Ages—Years.																			
		Under 1 Year.	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards.	St. John's Ward.	Avenham Ward.	Christ Church Ward	Ashton Ward.	Maudland Ward.	St. Peter's Ward.	Moorbrook Ward.	Park Ward.	Trinity Ward.	Deepdale Ward.	Ribbleton Ward.	Fishwick Ward.	Gaol. Infirmary, &c.	Removed to Hospital.
Small Pox	99	...	2	8	23	64	2	2	3	5	6	1	3	13	18	18	22	8	...	...	91
Cholera	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	73	2	36	23	6	6	...	4	2	3	12	9	9	9	5	5	8	3	4	...	...
Membranous Croup ...	6	1	5	...	...	...	...	...	...	1	...	1	1	...	1	2	...	...	...	...	...
Erysipelas	46	1	1	3	1	37	3	5	3	3	2	...	3	3	9	6	5	3	4	...	...
Scarlet Fever	105	3	32	58	9	3	...	34	5	7	8	7	7	9	11	6	1	4	6	...	...
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...
Enteric Fever	125	...	11	36	29	47	2	9	7	1	7	6	5	12	12	15	19	24	8	...	..
Relapsing Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	4	...	...	1	...	3	...	...	...	...	...	...	1	2	...	1	...	...	...	...	...
Puerperal Fever... ...	11	...	...	...	...	...	...	...	...	...	1	...	2	1	1	1	2	2	1	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	469	7	87	129	68	160	7	54	20	20	36	24	31	49	57	54	57	44	23	...	91

TABLE 4A.

Causes of, and Ages at, Death during Year 1904.

Causes of Death.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							Deaths at all ages of "Residents" belonging to Localities, whether occurring in or beyond the District.												Deaths in Public Institutions.	Deaths in Workhouse.
	All Ages.	Under 1 Year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards.	St. John's Ward.	Avenham Ward.	Christ Church Ward.	Ashton Ward.	Maudland Ward.	St. Peter's Ward.	Moorbrook Ward.	Park Ward.	Trinity Ward.	Deepdale Ward	Ribbleton Ward	Fishwick Ward.		
Small-pox	7	...	...	...	...	6	1	...	...	...	..	...	...	...	1	...	...	...	...	6	...
Measles	87	30	55	1	...	1	...	21	3	3	1	6	12	4	12	5	5	6	9	...	...
Scarlet Fever	8	1	5	2	...	...	...	3	...	...	...	1	2	...	1	...	1	...	...	...	...
Whooping Cough	30	13	16	1	...	...	...	2	1	...	3	2	4	4	4	6	3	...	1	...	...
Diphtheria and Membranous Croup	21	2	12	6	...	1	...	...	...	...	5	3	5	1	3	...	2	1	1	...	...
Croup	14	5	6	3	...	...	...	1	...	1	2	1	1	1	3	2	1	...	1	...	...
Fever: Typhus	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fever: Enteric	29	...	...	5	7	16	1	2	2	...	1	...	...	4	2	6	6	3	3	...	...
Fever: Other continued	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...
Epidemic Influenza	21	1	1	1	2	10	6	2	2	1	...	1	2	2	2	1	2	3	2	...	1
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Diarrhœa	142	112	21	1	1	3	4	19	1	11	4	14	10	10	19	19	9	9	17	...	...
Enteritis	9	8	...	...	...	1	...	3	...	1	1	1	...	1	...	2	...	...	...	...	...
Puerperal Fever	5	...	...	...	...	2	3	...	...	...	1	...	...	...	2	...	1	1	...	...	...
Erysipelas	2	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...
Other Septic Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis	149	1	3	8	28	99	10	7	6	10	6	10	17	11	13	8	16	12	5	2	26
Other Tubercular Diseases	117	65	37	10	2	3	...	16	5	10	4	4	14	9	23	13	8	6	1	4	...
Cancer. Malignant Disease	97	...	...	2	...	55	40	8	11	3	7	4	5	11	4	12	6	7	3	10	6
Bronchitis	295	89	24	1	3	81	97	30	18	12	18	22	34	19	34	35	24	15	12	2	20
Pneumonia	127	19	21	4	13	47	23	13	9	7	12	8	8	11	15	17	11	3	8	1	4
Pleurisy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Diseases of Respiratory Organs	1	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Alcoholism Cirrhosis of Liver	18	...	...	...	...	14	4	1	2	1	1	2	1	1	...	3	...	1	2	1	2
Venereal Diseases	5	4	...	...	1	...	...	..	...	...	...	...	...	2	...	1	1	...	...	...	1
Premature Birth	86	86	...	...	...	...	...	6	3	8	7	5	8	9	14	5	11	2	3	...	5
Diseases and accidents of Parturition	12	...	...	...	...	12	...	...	...	2	...	...	...	1	2	1	...	...	1	2	3
Heart Diseases	182	2	...	6	10	101	63	19	7	9	14	9	9	12	31	12	14	16	6	3	21
Accidents	45	2	10	1	5	19	8	4	2	1	2	4	...	...	3	3	2	5	2	16	1
Suicides	13	..	...	...	1	11	1	2	1	...	1	2	...	...	1	2	1	1	1	1	...
Old Age	136	...	...	...	...	9	127	14	8	8	7	11	7	11	15	9	10	12	9	...	15
All other causes	581	181	48	17	28	209	98	58	35	35	38	36	40	32	64	59	52	35	22	31	44
All causes	2239	622	259	70	101	701	486	232	116	123	135	146	179	156	268	221	187	138	110	79	149

TABLE No. 5.

Birth Rate, Death Rate, and Analysis of the Zymotic Death Rate in 33 of the largest English Towns for the Year ending 31st December, 1904.

Name of Town.	Population	Birth Rate.	Recorded Death Rate.	Corrected Death Rate.	ZYMOTIC DEATH RATE.								Death Rate per 1,000 from Phthisis.	Deaths under one Year to 1,000 Births.
					Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Who'ping Cough	Fever.	Diarrhœa.	Total.		
London	4,648,950	28·00	16·10	17 00	0·01	0·49	0·08	0·16	0·32	0·06	1·20	2·32	1·63	144
Croydon	144,419	26·10	13·80	14·20	0 00	0·43	0·06	0·17	0 10	0 03	1·03	1·82	0·98	129
West Ham	288,424	32·16	16·76	17·91	0 00	0 58	0 13	0 14	0 35	0·11	2·08	3·39	1·40	165
Brighton	126,286	23·50	16 50	16 30	0·00	0 74	0·01	0·13	0·28	0·06	0·43	1·65	1·36	133
Portsmouth	198,038	28·30	16·90	17 33	0·00	0·00	0·11	0·36	0 40	0·17	1·08	2·12	1 62	141
Norwich	115,538	27·6	18·20	17·40	0·00	1·14	0 02	0 07	0·34	0·14	1·18	2 89	1·40	179
Plymouth	114,003	25·33	18·74	18·21	0·00	0·70	0 31	0·11	0·24	0 15	1 02	2·53	1·47	173
Bristol	343.204	26 05	15·44	15 86	0·00	0·26	0·10	0·30	0·30	0·04	0·51	1·51	1·19	134
Wolverhampton .	98,194	29·80	14·61	15·29	0 00	0·00	0 14	0·18	0 61	0·12	1·65	2 70	0 90	152
Birmingham......	537,965	31·50	19·30	20 80	0·00	0 39	0 12	0·21	0·87	0 07	1·76	3·42	1·50	195
Leicester	224,186	26 67	14·56	15 55	0·02	0·14	0 02	0·03	0·40	0·06	1·31	1·98	1·57	163
Nottingham......	248,811	27 80	17·50	18·40	0 05	0·18	0·11	0·28	0·35	0 23	1·37	2 57	1·31	175
Derby	120,449	27 25	15·15	16 33	0·03	0 13	0 04	0·25	0·24	0·05	0·68	1·42	1·01	143
Birkenhead	114,814	33 14	19·87	21·20	0 00	0·85	0·17	0·17	0 72	0 11	1·53	3·55	1 51	181
Liverpool.........	723,430	33·50	21·90	23 40	0 00	0 96	0·20	0·27	0·58	0·11	2·52	4 64	1 70	196
Bolton	175,744	26 90	16 90	19 12	0 00	0·09	0 12	0 16	0·76	0·21	0·94	2·28	1·25	167
Manchester	557,938	31·20	21·30	23·79	0·02	0·77	0·15	0 17	0 50	0·12	1·37	3 10	1 99	187
Salford............	228,983	31·70	21·00	23·22	0·01	1·10	0 24	0·50	0 60	0·20	1·66	4·31	1·97	193
Oldham	139,497	24 90	18·30	20.60	0 10	0·50	0 16	0 24	0·26	0·16	0 91	2·33	1·38	155
Burnley	100,569	26·51	19·50	22.00	0 00	1 02	0 13	0·12	0·45	0 19	2·00	3 91	1·51	228
Blackburn	132,134	23·50	17·20	19.40	0·00	0·45	0 09	0·08	0·72	0·15	0 81	2·30	0·94	192
Preston	**115,055**	**28 26**	**17·83**	**19·52**	**0·05**	**0·74**	**0·06**	**0·18**	**0·25**	**0 25**	**1·43**	**2 96**	**1·06**	**183**
Huddersfield ...	94,925	23·71	17·51	18 81	0 01	0 79	0 11	0·15	0 26	0 07	0·51	1·90	1 33	136
Halifax	107,580	20 10	15 50	16 60	0·08	0·41	0·21	0·15	0 17	0 09	0 34	1 45	1·20	130
Bradford	285.089	22 02	17·54	19 39	0 01	0 53	0·12	0·53	0·19	0·14	0·83	2·35	1·38	167
Leeds	450,142	28·00	17·92	19·56	0 00	0·77	0·13	0 11	0 46	0·10	0 99	2·56	1·40	176
Sheffield	432,940	31 99	16·82	18·14	0 00	0·07	0 20	0·12	0·35	0 12	1·35	2·21	1·24	159
Hull..............	253,865	30 80	18 00	18·20	0 00	0·70	0 00	0·20	0·20	0 10	2·08	3 28	1 20	181
Sunderland	151,157	34·40	19 40	20 00	0·01	0 38	0 02	0 17	0·42	0 22	1·09	2·31	1·37	165
Gateshead	118,067	34·40	18·50	19·50	0·29	0 34	0·17	0 12	0 77	0 06	1·13	2·88	—	175
Newcastle	225,362	30·60	19·40	20·92	0 08	0·25	0·11	0·22	0·58	0 05	0·51	1·80	—	156
Cardiff	176,313	29 50	15·20	16 50	0·00	0·36	0 14	0 17	0·34	0 05	0 72	1·78	1·36	144
Swansea	95,931	30·50	17·70	18·90	0 00	0 00	0·14	0·24	0·99	0 05	0·77	2·19	1·46	172

TABLE No. 6.

The estimated Population, Number of Births and Deaths, Rates per thousand, and natural increase in the Borough, for each year since 1841.

Years.	Estimated Population.	No. of Deaths.	Death Rate per 1000.	No. of Births.	Birth Rate per 1000.	Natural Increase.
1841	51,000	1508	29·57	1974	38·70	466
1842	52,840	1550	29·33	1944	36·79	394
1843	54,680	1459	26·38	1975	36·12	516
1844	56,520	1380	24·42	2200	38·92	820
1845	58,360	1635	28·01	2293	39·29	558
1846	60,200	2189	36·36	2475	41·09	286
1847	62,050	2059	33·18	2268	36·59	209
1848	63,900	1550	24·26	2223	34·79	673
1849	65,750	1751	26·63	2403	36·55	652
1850	67,000	1745	25·81	2649	39·19	904
1851	69,450	2241	32·26	2803	40·36	562
1852	70,850	2284	32·23	2998	42·31	714
1853	72,250	2346	32·47	3072	42·51	726
1854	73,600	2013	27·35	3037	41·26	1024
1855	75,000	2557	34·10	3071	40·95	514
1856	76,400	2251	29·46	3151	41·24	900
1857	77,800	2131	27·39	3286	42·24	1155
1858	79,200	2545	32·13	3082	38·91	537
1859	80,600	2111	26·19	3399	42·17	1288
1860	82,000	2236	27·27	3381	41·23	1145
1861	82,985	2585	31·15	3626	43·69	1041
1862	83,231	2411	28·97	3522	42·32	1111
1863	83,477	2142	25·66	3388	40·57	1246
1864	83,686	2432	29·06	3422	40·89	990
1865	83,932	2708	32·26	3338	39·77	630
1866	84,178	2854	33·90	3535	41·99	681
1867	84,424	2608	30·89	3732	44·20	1124
1868	84,670	2798	33·04	3710	43·82	912
1869	84,916	2248	26·47	3434	40·44	1186
1870	85,162	2406	28·25	3486	40·93	1080
1871	85,427	2541	29·75	3438	40·24	897
1872	85,654	2294	26·78	3704	43·24	1410
1873	86,000	2899	33·71	3558	41·37	659
1874	86,000	2962	34·44	3582	41·65	620
1875	86,000	2581	30·01	3499	40·68	918
1876	86,600	2331	26·92	3623	41·84	1292
1877	87,000	2336	26·85	3601	41·39	1265
1878	87,300	2502	28·66	3697	42·35	1195
1879	87,600	2395	27·34	3403	38·83	1068
1880	88,000	2425	27·35	3475	39·49	1050
1881	96,524	2044	21·17	3489	36·14	1445
1882	97,656	2511	25·71	3785	38·76	1214
1883	98,564	2345	23·79	3576	36·28	1231
1884	99,481	2540	25·53	3745	37·64	1205
1885	100,406	2563	25·52	3868	38·52	1305
1886	101,340	2769	27·32	3961	39·08	1192
1887	102,283	2703	26·42	3870	37·83	1167
1888	103,234	2326	22·53	3823	37·03	1497
1889	104,194	3019	28·97	3912	37·63	902
1890	105,163	2726	25·92	3718	35·35	992
1891	107,864	2807	26·02	3830	35·50	1023
1892	109,038	2481	22·75	3686	33·80	1205
1893	110,225	2753	24·97	3809	34·55	1056
1894	111,425	2186	19·61	3545	31·81	1359
1895	112,638	2528	22·44	3702	32·95	1174
1896	113,864	2191	19·24	3673	32·25	1482
1897	115,103	2687	23·34	3687	32·03	1000
1898	116,356	2107	18·10	3559	30·58	1452
1899	117,622	2492	21·18	3492	29·68	1000
1900	118,902	2636	22·16	3410	28·67	774
1901	113,117	2213	19·56	3418	30·21	1205
1902	113,766	1998	17·56	3278	28·81	1280
1903	114,404	1955	17·08	3453	30·18	1498
1904	115,055	2091	17·83	3314	28·26	1223

TABLE No. 7.

Per Centage of Deaths from Zymotic Diseases to Sickness reported during the Year ending December 31st, 1904.

Disease.	No. of Cases Reported.	No. of Deaths.	Per Centage.
Small Pox	99	7	7·07
Typhoid Fever	125	29	23·20
Scarlet Fever	105	8	7·62
Diphtheria	73	21	28·76
Puerperal Fever	11	5	45·45
Erysipelas	46	1	2·18

TABLE No. 8.

Meteorological Observations for the Year ending 31st December, 1904.

Month.	Attached Thermometer.	Barometer.	Barometer corrected to 32 deg. Fahr.	Hygrometer		Temperature in Shade.		Earth Thermometer		Mean Daily Temperature.	Humidity Saturation=100	Temperature of Town's Water.	Rainfall in inches.	Number of Deaths from	
				Dry Bulb.	Wet Bulb.	Maximum	Minimum.	One Foot.	Four Feet.					Bronchitis.	Diarrhœa.
January	40·96	29·782	29·891	40·73	40·19	44·56	36·18	40·57	42·82	40·38	94	39·5	3·17	44	2
February	38·92	29·367	29·518	39·34	38·41	42·45	34·41	38·96	42·23	38·40	91	39·9	3·45	24	1
March	39·11	29·881	29·998	40·49	39·36	43·89	35·00	38·96	41·65	39·44	89	41·0	3·00	37	..
April	47·39	29·798	29 889	48·73	46·19	52·67	42·53	44·95	44·90	47·58	82	47·2	2·00	29	1
May	51·78	29·825	29·906	52·42	48·82	56·84	45·00	48·24	48·00	50·91	77	52·1	1·82	13	1
June	58·00	29·997	30·062	58·54	53·72	63·54	50·38	53·58	52·78	57·75	72	57·6	2·29	17	3
July	62·85	29·980	30·028	63·76	59·15	68·88	55·80	58·13	56·31	62·34	74	65·0	1·12	9	6
August	58·89	29·918	29·976	60·05	56·20	64·33	53·49	56·51	57·01	58·90	77	63·0	5·16	3	26
September	54·78	29·985	30·055	56·6	53·0	60·9	49·6	53·7	55·3	55·3	78	58·7	1·23	14	64
October	50·1	30·005	30·091	..	..	..	..	50·0	52·2	50·3	..	53·1	2·58	10	29
November	43·4	29·924	30·028	45·4	43·9	47·3	39·5	44·5	48·4	43·4	89	47·1	3·31	25	7
December	37·9	29·773	29·894	3 weeks 42·2	3 weeks 41·0	42·0	33·3	39·2	42·8	37·6	93	3 weeks 42·0	2·25	53	1

TABLE No. 9.

Summary of Work done during the Year 1904.

	No. 1 District.	No. 2 District.	No. 3 District.	No 4 District.	Total.
Number of Complaints received	202	270	360	1026	1,858
Inspections of Dwelling Houses	3988	3870	3113	2756	13,727
,, Infected Houses	210	197	275	458	1,140
,, Lodging Houses	20	1086	178	3739	5,023
,, Cellars	34	214	117	636	1,001
,, Canal Boats	...	...	...	105	105
,, Vans and Tents	...	106	48	231	385
,, Schools	10	58	62	219	369
,, Cowsheds, Dairies, and Milkshops	166	121	164	145	596
,, Slaughter Houses	26	87	61	124	298
,, Markets	...	304	37	676	1,017
,, Ashpits and Yards	3663	5461	3560	4043	16,727
,, Drains	4539	5437	3611	4356	17,943
Re-Inspections	2369	3796	2185	1657	10,007
Smoke Observations	15	..	...	2	17
Circular Letters sent	...	123	39	384	546
Notices served for Defective Slopstone Pipes	171	123	47	38	379
,, ,, Drains	159	147	136	198	640
,, ,, Spouts	22	27	39	60	148
,, ,, Water Closets	41	86	113	81	321
,, ,, Privies and Ashpits	14	13	...	2	29
,, ,, Yard Pavement	87	24	...	6	117
,, Overcrowding	...	7	...	...	7
,, Limewashing	24	190	26	50	290
,, Manure Accumulations	2	3	4	5	14
,, Stagnant Water	2	...	18	38	58
,, General Nuisances	27	65	30	61	183
Notices served to Sewer, Level, Pave, &c.	159	102	257	62	580
,, Flag Yards	299	978	797	354	2,428
,, Convert Privies into W.C's	384	666	712	339	2,101
,, Fill up Ashpits	8	33	...	32	73
,, Substitute Hopper W.C.'s for iron Macfarlane Closets	...	14	5	...	19
,, Connect House Drains to Sewer	...	...	10	...	10
House Drains Tested	59	58	78	49	244
School Drains Tested	1	...	...	...	1
Number of Animals Removed	94	7	4	12	117
Houses Disinfected	174	226	126	137	663
Schools Disinfected	6	21	14	29	70
Parcels of Bedding Disinfected	45	168	37	75	325
Number of Ashpails cleansed	...	...	...	...	1,292,978
,, Ashpits ,,	...	...	...	...	8,080
Fish Condemned and Destroyed	...	...	Wet Dry Shell	13601 lbs. 1191 ,, 188 ,,	14,980 lbs.
Fruit ,, ,,	...	50 lbs.	...	...	50 ,,
Cheese ,, ,,	...	...	...	240 lbs.	240 ,,
Tripe ,, ,,	...	...	...	476 ,,	476 ,,
Yeast ,, ,,	...	...	...	56 ,,	56 ,,

TABLE No. 10.

Summary of Work done under the Factory and Workshops Act during the year 1904.

	No 1 District.	No. 2 District.	No. 3 District.	No. 4 District.	Total.
Number of Workshops on Register	105	365	122	285	877
„ Circular Letters sent re Out-workers ...	...	60	...	140	200
„ Out-workers reported	2	45	7	33	87
Visits to Factories and Workshops	519	981	516	1485	3501
„ Retail Bakehouses	51	160	114	245	570
„ Public Bakehouses	76	61	118	127	382
Drains Tested	...	...	...	3	3
Defects found and remedied:—					
Defective Slopstone Pipes	...	...	...	2	2
„ Drains	4	3	6	9	22
„ Spouts	1	..	1	4	6
„ Water Closets	1	18	2	8	29
Offensive Ashpit abolished	...	...	...	1	1
Unflagged Yards	...	...	...	3	3
Privies converted into W.C.'s	..	...	...	4	4
Limewashing required......	4	6	12	10	32
General Nuisances	2	...	3	7	12
Cellar Bakehouses unfit, &c.	1	8	7	7	23
Insufficient Ventilation	1	...	...	1	2
Defective Floors	1	...	...	...	1
Insufficient W.C. accommodation for Females	...	12	...	2	14
No Receptacle for Refuse	...	...	...	3	3
Nuisances from Offensive Trades	...	2	...	1	3
Manure Accumulations	...	...	...	4	4
Overcrowding	...	...	...	3	3
No Abstract of Workshops Act in Workroom......	...	...	...	2	2

TABLE No. 11.

List of Factories and Workshops on Register during the year 1904.

		No. 1 District.	No. 2 District.	No. 3 District.	No. 4 District.	Total.
Bakers and Confectioners (Retail)		24	46	9	24	103
Bakers (Public)		8	10	4	6	28
Basket Makers		...	3	2	...	5
Beer Bottlers		3	5	...	3	11
Boot, Shoe, and Clog Makers, Leather Curriers ...		25	40	19	24	108
Brassfounders		1	2	...	...	3
Breweries		1	4	...	...	5
Brush Makers		...	1	...	2	3
Biscuit Makers		...	4	...	...	4
Cabinet Makers, Woodcarvers, Upholsterers...		4	14	6	12	36
Coach Builders		...	3	...	4	7
Cotton Waste Cleaners		...	1	...	...	1
Cotton Manufacturers		21	13	17	7	58
Coopers		1	3	1	...	5
Cycle Makers and Enamellers		1	10	6	7	24
French Polishers		1	4	...	2	7
Ironfounders ...		4	5	...	1	10
Joiners, Builders, Wheelwrights, Wood Turners ...		3	8	4	5	20
Marine Store Dealers		...	4	...	1	5
Milliners, Dressmakers, Underclothing Manufacturers		21	67	24	43	155
Picture Framers, Mount Cutters, Gilders		...	5	1	4	10
Photographers		1	3	...	2	6
Printers, Bookbinders, Engravers ...		...	3	...	21	24
Plumbers, Painters ...		10	11	2	17	40
Restaurant Keepers		...	8	...	3	11
Rope and Twine Makers		1	...	2	...	3
Saddlers		...	6	1	3	10
Smiths		1	7	6	21	35
Slipper Makers		...	3	...	...	3
Stone and Marble Masons		4	5	..	2	11
Sugar Boilers ...		...	4	...	...	4
Tailors		3	25	11	39	78
Watch Makers and Jewellers		...	11	3	8	22
Wire Rope Makers ...		...	1	...	...	1
Wire Workers		...	1	1	...	2
Offensive Trades	Fell Mongers	...	...	...	1	1
	Soap Boilers	...	...	1	4	5
	Fat and Tallow Melters	...	4	...	3	7
	Tripe Boilers	1	2	...	1	4
	Knacker Yards	1	...	...	...	1
	Gut Scrapers	...	4	..	...	4
Various		...	15	3	15	33

TABLE No. 12.

HEALTH VISITORS.

Summary of Work done during the Year 1904.

			Districts.		Total.
			A.	B.	
Visits, Diarrhœa Deaths.		Number of Houses visited ……	54	63	117
		„ „ Found Clean ……	45	55	100
		„ „ „ Dirty ……	9	8	17
	Children	Breast Fed … ……	5	3	8
		Artificially Fed ……	41	4	45
		Partially Breast Fed ……	8	56	64
Visits, Measles Deaths.		Number of Houses visited ……	32	34	66
		„ „ Found Clean ……	24	23	47
		„ „ „ Dirty ……	8	11	19
Visits, Births.		Number of Houses visited ……	1630	1247	2877
		„ „ Found Clean ……	1413	1014	2427
		„ „ „ Dirty ……	217	233	450
	Children	Breast Fed … ……	1084	722	1806
		Artificially Fed ……	310	234	544
		Partially Breast Fed ……	236	291	527
Visits, House to House.		Number of Houses visited ……	148	545	693
		„ „ Found Clean ……	74	299	373
		„ „ „ Dirty ……	74	246	320
		Visits—Infectious Disease amongst School Children ……	170	223	393
		Re-visits, Number of …… ……	1832	872	2704
		No of Cards distributed … ……	1635	1247	2882

TABLE No. 13.

Return of Work done by Inspector of Food and Drugs, &c., during the year 1904.

Food and Drugs, Samples purchased …… ……	263
Cow-sheds and Dairies visited …… ……	192
Slaughter-houses visited …… …… ……	4,423
Meat Condemned and Destroyed …… ……	94,137 lbs.
Fish Do. Do. …… …… ……	4,018 lbs.

TABLE No. 14.

Contagious Diseases (Animals) Act, 1878.

Name of Disease.	Situation of Premises.	Date of Outbreak.	Number of Diseased Animals.	Number of Healthy Animals.	Slaughtered by Owner.	Slaughtered by Order of Board of Agriculture.	Number of Visits.
Sheep Scab	Loxham House Farm	January 11th	2	17	...	...	5
Anthrax	Cheetham Street	March 13th	1	...	1	...	6
Anthrax	Miller Road	Sept 16th	1	4	1	...	6
Swine Fever	Frenchwood Farm	May 13th	26	12	5	7	20

TABLE No. 15.

Substances submitted for Analysis during the year 1904.

Name of Article.	No. of Samples.	Result.
Butter	55	Genuine
Bread	12	Do.
Baking Powder ...	1	Do.
Beer	3	Do.
Brandy	7	Do.
Coffee	25	Do.
Cheese	5	Do.
Cream	2	Do.
C'mpound Liquorice Powder	3	Do.
Gin	2	Do.
Jam	1	Do.
Lard	12	Do.
Milk	76	Do.
Milk (Skimmed) ...	5	Do.
Milk (Condensed)...	1	Do.
Margarine............	1	Do.
Mace..................	1	Do.
Pepper (White) ...	6	Do.
Pepper (Cayenne)...	2	Do.
Sweets	8	Do.
Vinegar..............	5	Do.
Whiskey	6	Do.
	239	Genuine
	24	Adulterated
	1	Private Sample
	264	Total
Brandy	1	0·6 per cent. under proof. Probably not derived from Wine.
,, ...	1	6·8 per cent. under proof, and consisted mainly of neutral or patent-still spirit, flavoured. Vendor summoned, case dismissed.
,, ...	1	14·7 per cent. under proof, and consisted of neutral grain spirit. Vendor summoned, and fined £2 and costs.
,, ...	1	15·9 per cent. under proof, and consisted of neutral grain spirit. Vendor summoned, and fined £3 and costs.
,, ...	1	16·9 per cent. under proof, and contained, approximately, 60 per cent. of neutral or patent-still spirit. Vendor summoned; case dismissed.

TABLE No. 15—(Continued).

Name of Article.	No. of Samples.	Result.
Brandy	1	19·6 per cent. under proof, and consisted of neutral grain spirit. Vendor summoned, and fined £5 and costs.
,, ...	1	20·7 per cent. under proof, and contained, approximately, 50 per cent. of neutral or patent-still spirit. Vendor summoned ; case withdrawn
,, ...	1	23·7 per cent. under proof, and consisted of neutral grain spirit. Vendor summoned, and fined £5 and costs.
,, ...	1	24·2 per cent. under proof, and consisted of neutral grain spirit. Vendor summoned, and fined £2 and costs.
,, ...	1	28·0 per cent. under proof Vendor cautioned by Town Clerk
,, ...	1	Common Brandy, and contained a proportion of neutral or patent-still spirit.
,, ...	1	Contained a proportion of rectified spirit.
Cream	1	Contained 63 grains borates per pint ; equivalent to 0·724 parts of boric acid per cent.
,, ...	1	Contained 39·5 grains borates per pint ; equivalent to 0·45 parts of boric acid per cent.
,, ...	1	Contained borates equivalent to 0·45 parts of boric acid per cent.
Coffee	1	Contained upwards of 5 per of chicory.
C'mpound Liquorice Powder	1	Contained, approximately, 60 per cent. of ground olive stones. Vendor summoned, and fined 5s. and costs.
Milk	1	2·45 per cent. fat, 9·46 per cent. other solids, = 11·91 per cent total solids. Vendor cautioned by Town Clerk.
,, ...	1	2·70 per cent. fat, 8·36 per cent other solids, = 11·06 per cent. total solids. Vendor cautioned by Town Clerk.
,, ...	1	2·77 per cent. fat, 8·71 per cent. other solids. = 11·48 per cent. total solids. Vendor cautioned by Town Clerk.
,, ...	1	2·75 per cent. fat, 9·08 per cent. other solids, = 11·83 per cent. total solids. Vendor cautioned by Town Clerk.
Margarine............	1	13 per cent. water, and upwards of 80 per cent. fats other than butter.
Pepper (White).. ...	1	Contained about 10 per cent. excess of pepper husks, which had been slightly bleached.

TABLE No. 16.

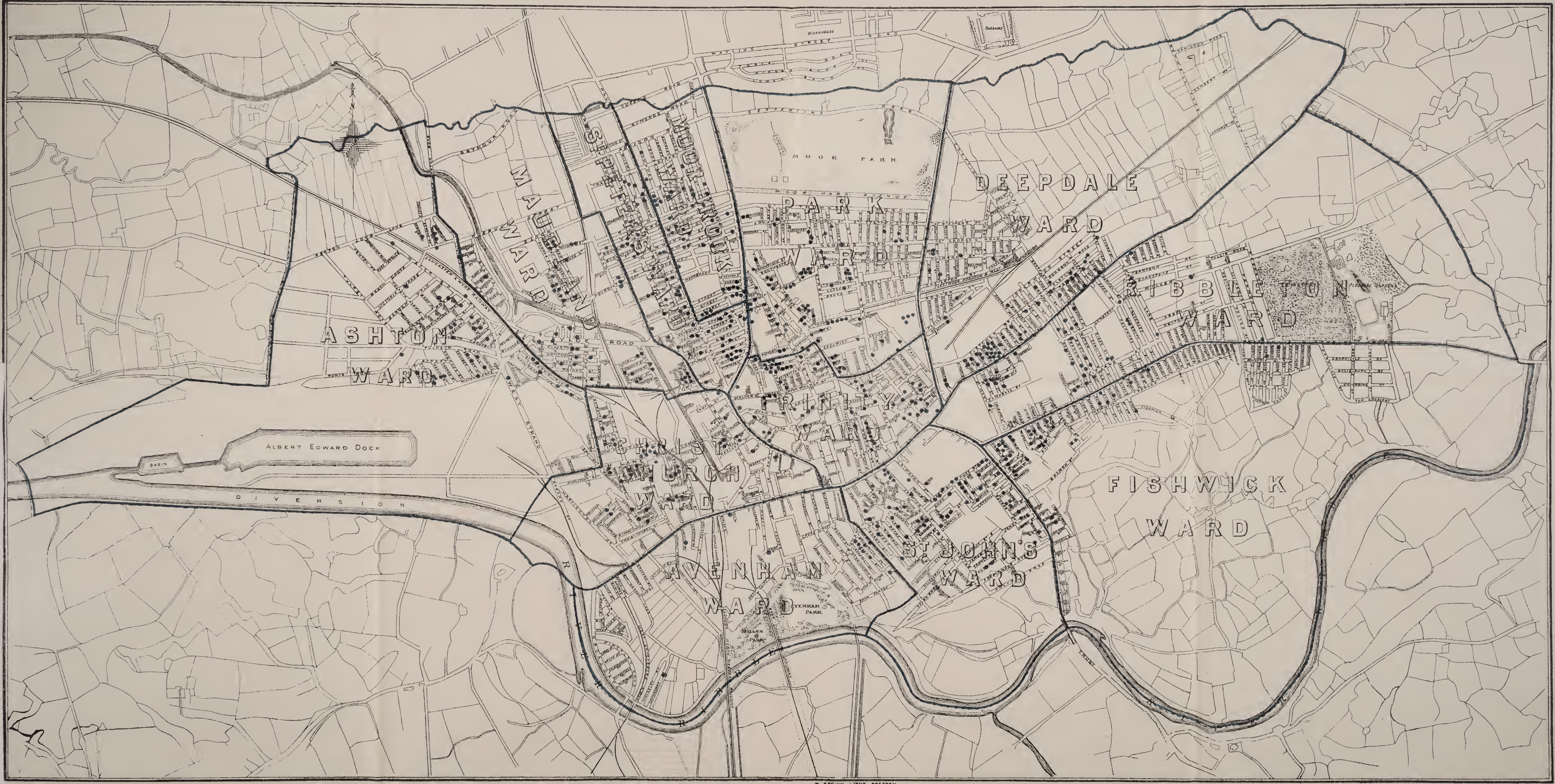
Return of Port Sanitary Work for the Year ending December 31st, 1904.

Steamships Inspected		987
Sailing Vessels Inspected		99
Re-Inspections		114
Condition of Vessels Inspected	Good	944
	Defective	142

Defects Remedied.

Forecastle Dirty	46
Do. Required Painting	17
Do. Deck Leaking	4
Do. Ventilation and Light Defective	2
Foul and Defective Water Closet	37
Foul Water Casks and Tanks	21
Dirty Provision Lockers	26
Do. Bilges	6
Do. Chain Lockers under Forecastle	3

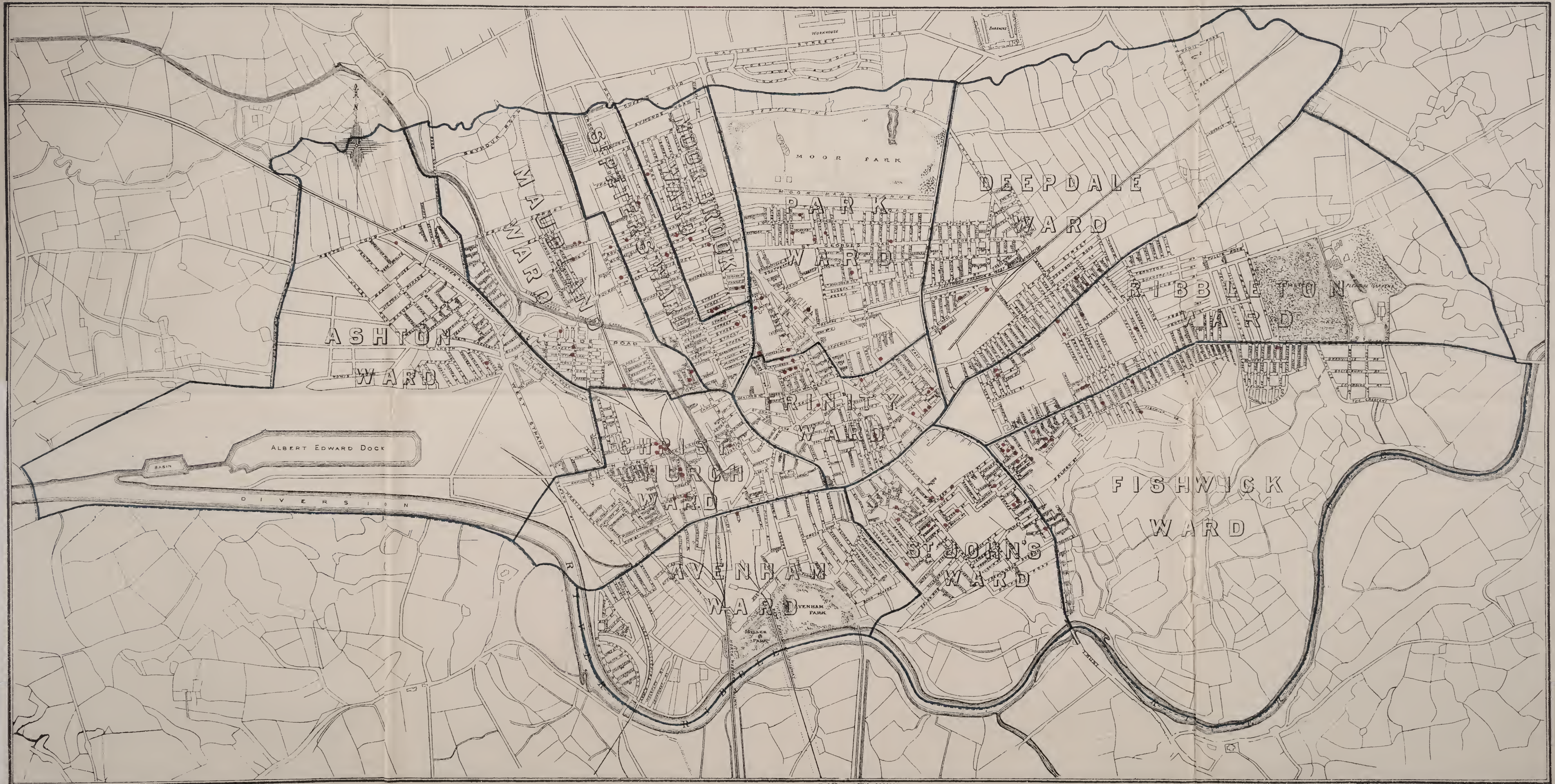
INFANTILE MORTALITY, 1904



W. BROWN, LITHO. PRESTON

INFANTILE DIARRHŒA, 1904.

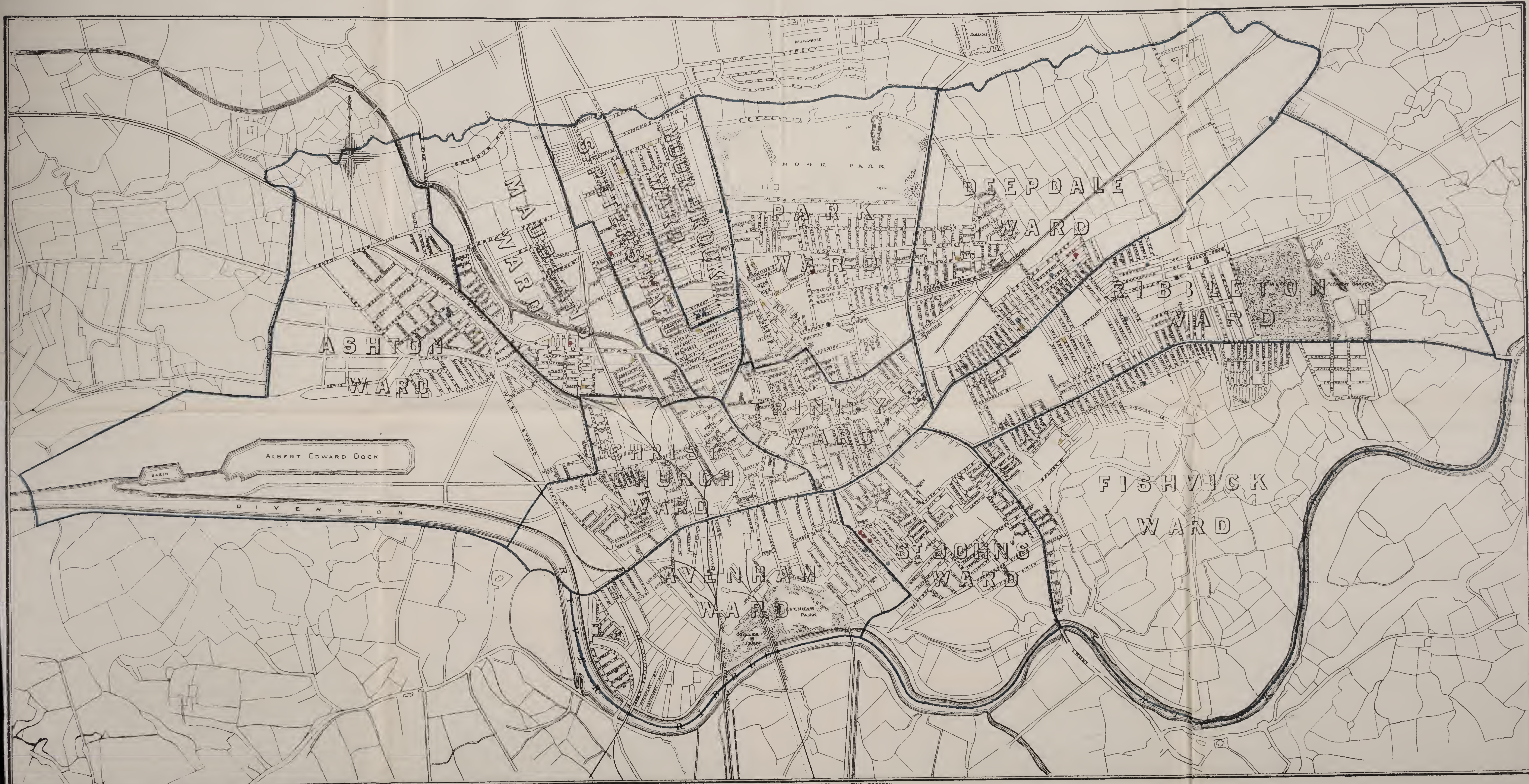
The Red Spots ● indicate deaths from Diarrhœa under the age of one year.



W BROWN, LITHO. PRESTON

ZYMOTIC DISEASES, 1904.

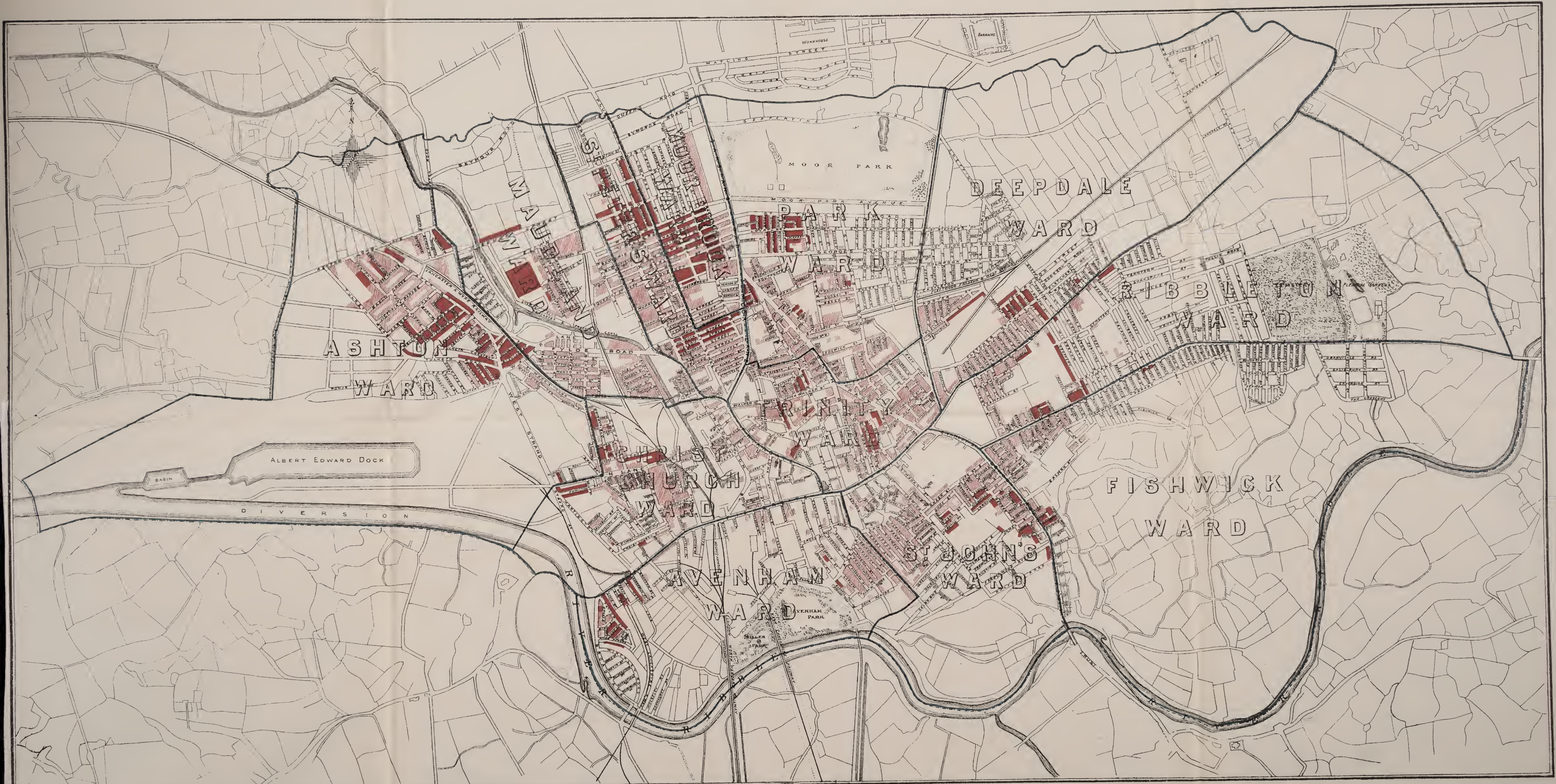
The Red Spots ● indicate deaths from Scarlet Fever.
The Blue Spots ● indicate deaths from Typhoid Fever.
The Yellow Spots ● indicate deaths from Diphtheria.



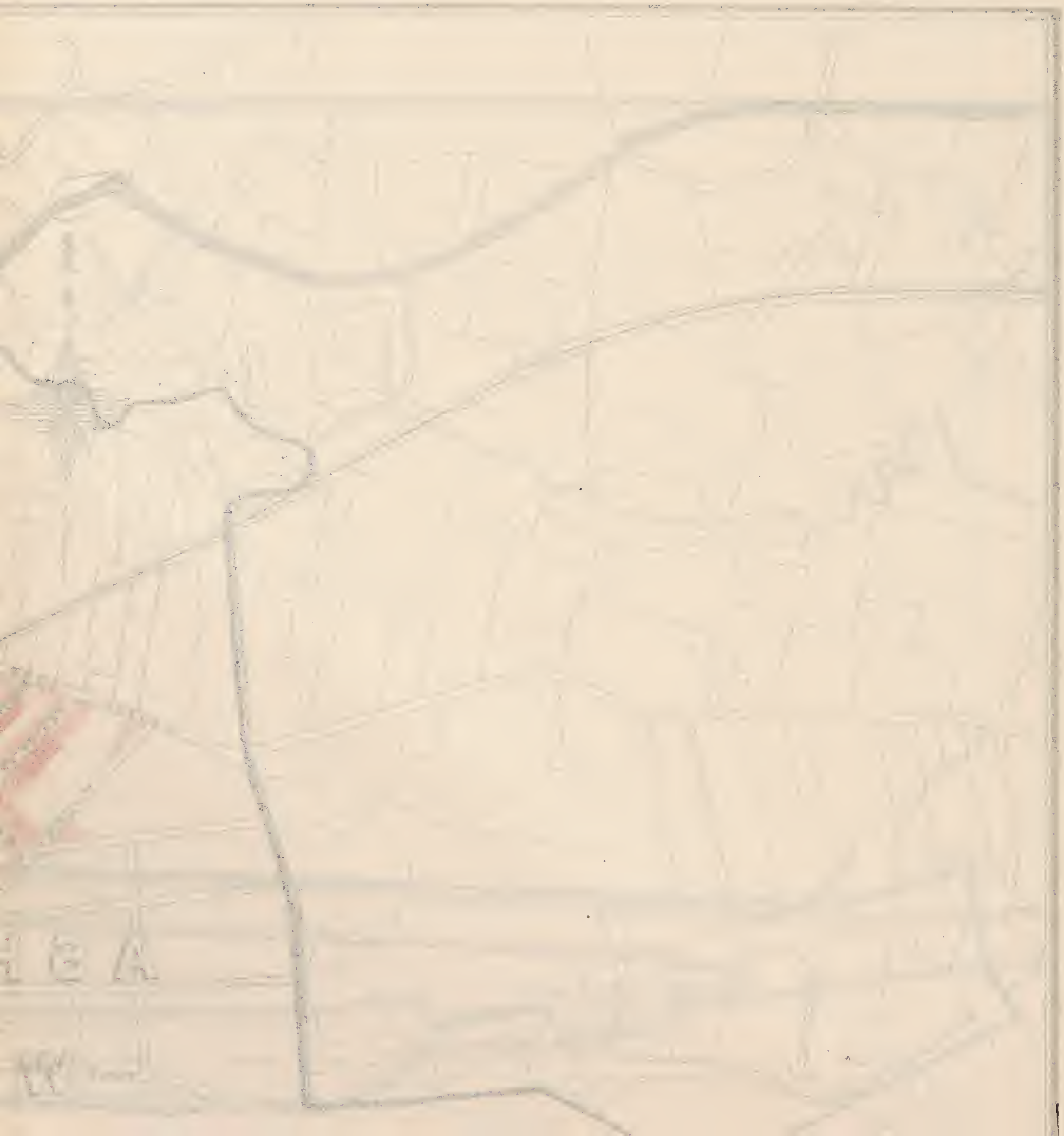
W. BROWN, LITHO. PRESTON

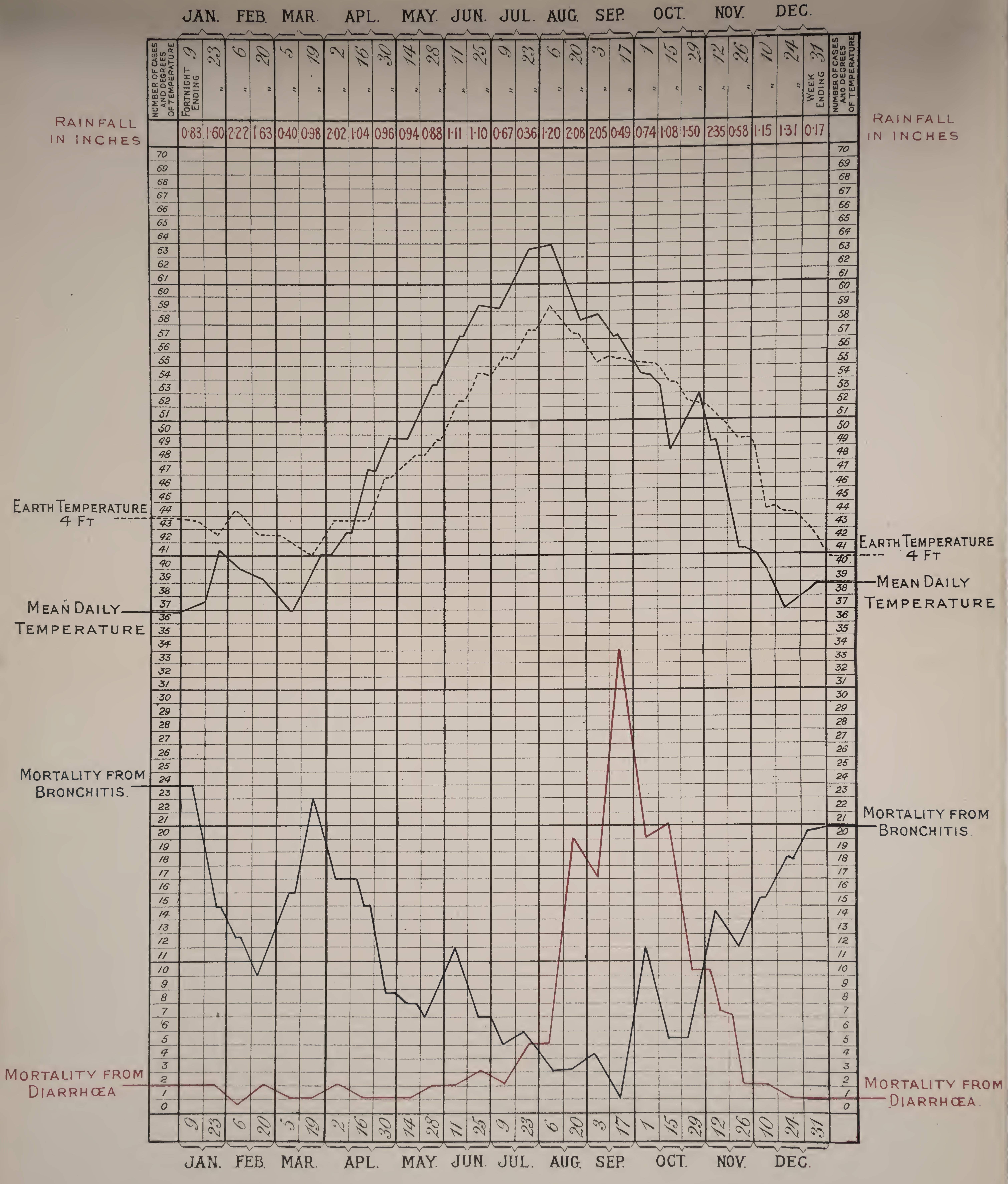
Portions coloured Red indicate Property reported upon and improved during the Year 1904.

Those in lighter shade indicate Blocks dealt with during the previous Twenty Years.



W. BROWN, LITHO. PRESTON.




JAN. FEB. MAR. APL. MAY. JUN. JUL. AUG. SEP. OCT. NOV. DEC.
NUMBER OF CASES AND DEGREES OF TEMPERATURE
FORTNIGHT ENDING 9, 23, 6, 20, 5, 19, 2, 16, 30, 14, 28, 11, 25, 9, 23, 6, 20, 3, 17, 1, 15, 29, 12, 26, 10, 24
WEEK ENDING 31
RAINFALL IN INCHES
0·83 1·60 2·22 1·63 0·40 0·98 2·02 1·04 0·96 0·94 0·88 1·11 1·10 0·67 0·36 1·20 2·08 2·05 0·49 0·74 1·08 1·50 2·35 0·58 1·15 1·31 0·17
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70
EARTH TEMPERATURE 4 FT
MEAN DAILY TEMPERATURE
MORTALITY FROM BRONCHITIS.
MORTALITY FROM DIARRHŒA